[redacted]

09jun03 10:23:17 User217743 Session D607.1
$0.00 0.156 DialUnits FileHomeBase
$0.00 Estimated cost FileHomeBase
$0.00 Estimated cost this search
$0.00 Estimated total session cost 0.156 DialUnits
File 410:Chronolog(R) 1981-2003/Mar
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Set Items Description
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? set hi *;set hi *
HILIGHT set on as '*'*
HILIGHT set on as ''
? b 155
09jun03 10:23:21 User217743 Session D607.2
$0.00 0.074 DialUnits File410
$0.00 Estimated cost File410
$0.01 TELNET
$0.01 Estimated cost this search
$0.01 Estimated total session cost 0.231 DialUnits
File 155:MEDLINE(R) 1966-2003/Jun W1
(c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have changed. Please see HELP NEWS 155.

Set Items Description
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? s (cancer and marker)/ti
243761 CANCER/TI
16359 MARKER/TI
S1 1246 (CANCER AND MARKER)/TI
? s s1 and protein/ti
1246 S1
261777 PROTEIN/TI
S2 54 S1 AND PROTEIN/TI

Set Items Description
S1 1246 (CANCER AND MARKER)/TI
S2 54 S1 AND PROTEIN/TI
? t s2/3,ab/all

2/3,AB/1
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14434284 22385002 PMID: 12497585
Serum insulin-like growth factor binding *protein* -3/prostate-specific antigen ratio is a useful predictive *marker* in patients with advanced prostate *cancer*.
Miyata Yasuyoshi; Sakai Hideki; Hayashi Tomayoshi; Kanetake Hiroshi Department of Urology, Nagasaki University School of Medicine, Nagasaki, Japan.
Prostate (United States) Feb 1 2003, 54 (2) p125-32, ISSN 0270-4137 Journal Code: 8101368
Document type: Clinical Trial; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
BACKGROUND: Insulin-like growth factor-1 (IGF-1) and insulin-like growth factor binding protein-3 (IGFBP-3) play an important role in regulation of prostate cancer cell growth. We studied the prognostic significance of serum IGF-1 and IGFBP-3 levels, and IGF-1/prostate-specific antigen (PSA) and IGFBP-3/PSA ratios in patients with prostate cancer. METHODS: Serum levels of IGF-1, IGFBP-3, and PSA were determined in 112 patients diagnosed with prostate cancer. Serum samples from 32 patients with histologically confined benign prostatatic hyperplasia (BPH) served as control. RESULTS: Serum IGF-1 levels were significantly higher in advanced prostate cancer (n = 84) than in BPH patients (P < 0.01). IGFBP-3 levels were significantly lower in patients with advanced prostate cancer than in localized tumor (n = 28) or BPH (P < 0.05, each). Univariate analysis showed that serum PSA, IGF-1/PSA ratio, IGFBP-3/PSA ratio, T, N and M classifications correlated significantly with relapse-free survival of advanced prostate cancer patients treated with hormonal therapy. Multivariate analysis identified IGFBP-3/PSA ratio as the only significant variable for relapse-free survival (odds ratio 5.81, 95% CI 1.57-21.51). IGFBP-3/PSA ratio was also an independent predictor of cause-specific survival (stepwise analysis, odds ratio 4.86, P < 0.01). CONCLUSIONS: Our results suggested that IGFBP-3/PSA ratio might be a useful prognostic marker of advanced prostate cancer. Copyright 2002 Wiley-Liss, Inc.

2/3,AB/2
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

11913800 99357147 PMID: 10430078
tie-1 *protein* tyrosine kinase: a novel independent prognostic *marker* for gastric *cancer*.
Lin W C; Li A F; Chi C W; Chung W W; Huang C L; Lui W Y; Kung H J; Wu C W Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, Republic of China.
Clinical cancer research - an official journal of the American Association for Cancer Research (UNITED STATES) Jul 1999, 5 (7) p1745-51, ISSN 1078-0432 Journal Code: 9502500
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Protein tyrosine kinases (PTKs) are a major class of proto-oncogenes that are involved in tumor progression. The purpose of this study was to establish a comprehensive PTK expression profile in gastric cancers, with the objective of identifying possible biomarkers for gastric cancer progression. We have designed

degenerate primers according to the consensus catalytic motifs to amplify PTK molecules from gastric cancers by reverse transcriptase-PCR methods. The PTK expression profile was established by sequencing analysis of the cloned PCR products. We have identified 17 PTKs from a gastric adenocarcinoma. Two receptor PTKs, tie-1 and axl, were selected for in situ immunohistochemistry studies because of their higher expression level and their described roles in adhesion, invasion, and angiogenesis. Among the 97 gastric adenocarcinoma tissues examined, we observed positive immunohistochemical staining of tie-1 PTK in 69 and positive staining of axl kinase in 71 tissues. Statistical analysis with clinicopathological features indicates that tie-1 kinase expression is inversely correlated with patients' survival, whereas axl fails to show similar clinical significance. Our results illustrate the utility of tyrosine kinase gene family profiling in human gastric cancers and show that tie-1 tyrosine kinase may serve as a novel independent prognostic marker for gastric adenocarcinoma patients.

2/3,AB/3
DIALOG(R)File 155:MEDLINE(R)

11870578 99312090 PMID: 10385364
Impact of splenectomy and immunochemotherapy on survival following gastrectomy for carcinoma: covariate interaction with immunosuppressive acidic *protein*, a serum *marker* for the host immune system. Tumor *Marker* Committee for the Study Group of Immunochemotherapy with PSK for Gastric *Cancer*.
Saji S; Sakamoto J; Teramukai S; Kunieda K; Sugiyama Y; Ohashi Y; Nakazato H
Second Department of Surgery, Gifu University, Japan.
Surgery today (JAPAN) 1999, 29 (6) p504-10, ISSN 0941-1291 Journal Code: 9204360
Document type: Clinical Trial; Journal Article; Randomized Controlled Trial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The role of the spleen in tumor immunology is still controversial in that it can either enhance or suppress the antitumor immune response depending on the tumor-bearing host. To clarify this biphasic effect of the spleen, a clinical evaluation of splenectomy in conjunction with immunotherapy and the host immune status was performed in gastric cancer patients. The effect of splenectomy and immunotherapy in 253 gastric cancer patients enrolled in a prospective randomized trial (SIP) was analyzed using the Cox's proportional hazards model in terms of the covariate interaction of the preoperative immunosuppressive acidic protein (IAP) level. In patients with high IAP levels (>580 microg/ml) with predicted negative antitumor immune reactions, splenectomy improved the prognosis. In patients with lower IAP values, conversely, the preservation of the spleen and immunotherapy demonstrated a significant benefit to survival. The spleen was shown to have a biphasic activity in terms of its antitumor immune response depending on the IAP level of the patient. The effect of immunotherapy is significantly influenced by the activity of spleen cells. The preoperative IAP level is therefore considered to be a possible indicator for the effectiveness of splenectomy and immunotherapy in curatively resected gastric cancer patients.

2/3,AB/4
DIALOG(R)File 155:MEDLINE(R)

11804182 99243420 PMID: 10226833
Urinary nuclear matrix *protein* 22 as a new *marker* for the screening of urothelial *cancer* in patients with microscopic hematuria.
Miyanaga N; Akaza H; Tsukamoto T; Ishikawa S; Noguchi R; Ohtani M; Kawabe K; Kubota Y; Fujita K; Obata K; Hirao Y; Kotake T; Ohmori H; Kumazawa J; Koiso K
University of Tsukuba, Japan.
International journal of urology - official journal of the Japanese Urological Association (JAPAN) Apr 1999, 6 (4) p173-7, ISSN 0919-8172 Journal Code: 9440237
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
PURPOSE: The aim of the present study was to determine the clinical usefulness of nuclear matrix protein 22 (NMP22) as a new urinary marker for the screening of urothelial cancer in patients with microscopic hematuria, especially in comparison with that of voided urine cytology. METHODS: Patients with microscopic hematuria detected at a health examination, who were advised by a consulted urologist to have a cystoscopical examination, were asked to enter this study. Urine samples were collected before cystoscopy and divided into two portions for NMP22 test and voided urine cytology. RESULTS: Of the 309 patients with microscopic hematuria, 22 cases (7.1%) of urothelial cancer and one case of prostate cancer were detected. For the other cases, 128 (41.4%) were of benign diseases and 158 (51.1%) were designated as having no evidence of disease (NED). The median NMP22 values for urothelial cancer, other diseases and NED were 35.5, 6.7 and 6.0 U/mL, respectively, with 95% confidence intervals of 19.9-228.2, 5.1-9.3 and 5.4-7.2, respectively. The sensitivity of the NMP22 test for urothelial cancer was 90.9% (20/22), whereas the sensitivity of voided urine cytology was only 54.5% (12/22). CONCLUSIONS: The present study indicates that urinary NMP22 is a useful tool for the screening of urothelial cancer in patients with microscopic hematuria.

2/3,AB/5
DIALOG(R)File 155:MEDLINE(R)
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11696385 99132236 PMID: 9931057
Lectin ELISA for the c-erb-B2 tumor *marker* *protein* p185 in patients with breast *cancer* and controls.
Cook D B; Bustamam A A; Brotherick I; Shenton B K; Self C H Departments of Clinical Biochemistry, University of Newcastle upon Tyne, NE2 4HH, United Kingdom.
Clinical chemistry (UNITED STATES) Feb 1999, 45 (2) p292-5, ISSN 0009-9147 Journal Code: 9421549
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

2/3,AB/6
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

11675869 99111134 PMID: 9815576
Expression of nucleolar *protein* p120 in human lung *cancer*: difference in histological types as a *marker* for proliferation. Uchiyama B; Saijo Y; Kumano N; Abe T; Fujimura S; Ohkuda K; Handa M; Satoh K; Nukiwa T
Department of Respiratory Oncology, Institute of Development, Tohoku University, 4-1 Seiryomachi Aobaku, Sendai 980-77, Japan.
Clinical cancer research - an official journal of the American Association for Cancer Research (UNITED STATES) Oct 1997, 3 (10) p1873-7, ISSN 1078-0432 Journal Code: 9502500
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The function of proliferation-associated nucleolar protein p120 is unclear. A recent report that a yeast protein, NOP2, 67% homologous to human p120, is up-regulated during the onset of growth and influences the morphology of the nucleolus supports the notion that this protein could serve as a marker for proliferation in neoplastic cells. Lung cancer is characteristic in that different histological types show different biological features. We attempted to evaluate the levels of p120 expression in resected human lung cancer tissues of different histological types and the relation of p120 expression and cell proliferation using human lung cancer cell lines. When 37 frozen specimens of human lung cancer and normal lung were stained with a p120 monoclonal antibody, the nucleoli of cancer cells were positively stained, whereas a few macrophages in normal lung revealed only weak staining. The labeling index of p120 in squamous cell carcinoma (67.7 +/- 12.4%) was significantly higher than that in adenocarcinoma (35.3 +/- 12.6%) or in large cell carcinoma (30.1 +/- 17.3%; P < 0.01). In six human lung cancer cell lines and one normal lung fibroblast cell line cultured in vitro, there was a significant correlation between S-phase fraction and p120 mRNA (r = 0.851, P < 0.02)/p120 protein (r = 0.869, P < 0.01) or between doubling time and p120 protein (r = -0.928, P < 0.01). In the context of the reports that indicate higher [3H]thymidine incorporation and shorter doubling time in the squamous cell carcinoma, these results indicate that p120 can be a marker for proliferation in human lung cancer cells in vivo and in vitro, and that it has an important function in the cell cycle of tumor proliferation.

2/3,AB/7
DIALOG(R)File 155:MEDLINE(R)
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11602433 99035136 PMID: 9816288
The small heat shock *protein* HSP27 is not an independent prognostic *marker* in axillary lymph node-negative breast *cancer* patients. Oesterreich S; Hilsenbeck S G; Ciocca D R; Allred D C; Clark G M; Chamness G C; Osborne C K; Fuqua S A
Department of Medicine, Division of Medical Oncology, University of Texas Health Science Center at San Antonio, San Antonio, Texas 78284-7884, USA. Clinical cancer research - an official journal of the American Association for Cancer Research (UNITED STATES) Jul 1996, 2 (7) p1199-206, ISSN 1078-0432 Journal Code: 9502500
Contract/Grant No.: P30 CA30195; CA; NCI; P50 CA58183; CA; NCI Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Heat shock protein 27 (hsp27) belongs to the family of heat shock proteins and is thought to be involved in thermotolerance, cell proliferation, drug resistance, and chaperone processes. The aim of this study was to investigate whether hsp27 levels are correlated with clinical outcome in axillary lymph node-negative breast cancer patients. We describe a Western blot study measuring hsp27 levels in 425 patients and an immunohistochemistry (IHC) study analyzing 788 patients. Results obtained by both methods were concordant. Univariate survival analysis was performed considering hsp27 either as an optimally dichotomized variable or as a continuous variable. Additional data include age at biopsy, tumor size, estrogen receptor (ER) and progesterone receptor status, tumor ploidy and percentage of cells in S phase, and adjuvant therapy. hsp27 levels correlated positively with ER status (P = 0.0001 in Western blot and IHC study), progesterone receptor status (P = 0.0001 in

Western blot and IHC study), and aneuploidy (Western blot study, P = 0.0012; IHC study, P = 0.0004) but not with tumor size (Western blot study, P = 0.69; IHC, P = 0.53) or S phase (Western blot study, P = 0.19; IHC study, P = 0.38). Overall, there was no relationship between hsp27 expression and disease-free survival (Western blot study, P = 0.70/0.54; IHC, P = 0.47/0.30) or overall survival (Western blot study, P = 0.16/0.15; IHC, P = 0.46/0.78). Exploratory subset analyses defined by ER status and use of adjuvant treatment indicated that in ER+/untreated patients, high hsp27 levels correlated modestly with shorter disease-free survival (Western blot, P = 0.04/0.04; IHC, P = 0.11/0. 03). hsp27 is not a useful prognostic marker for the clinic in axillary lymph node-negative patients. However, the finding of modest prognostic value of hsp27 in the subgroup of ER+/untreated patients raises new questions about the biological function of hsp27 in breast cancer.

2/3,AB/8
DIALOG(R)File 155:MEDLINE(R)

11602239 99034942 PMID: 9815924
p53 nuclear *protein* expression is an independent prognostic *marker* in clinically localized prostate *cancer* patients undergoing radical prostatectomy.
Bauer J J; Sesterhenn I A; Mostofi K F; McLeod D G; Srivastava S; Moul J W
Urology Service, Departments of Surgery and Clinical Investigation, Walter Reed Army Medical Center, Washington, DC 20307-5001, USA. Clinical cancer research - an official journal of the American Association for Cancer Research (UNITED STATES) Nov 1995, 1 (11) p1295-300, ISSN 1078-0432 Journal Code: 9502500
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Immunohistochemical (IHC) staining for p53 protein nuclear expression was evaluated in archival paraffin-embedded radical prostatectomy specimens from 139 patients with clinically localized prostate cancer followed up from 1 to 8 (mean, 4) years. Elevated nuclear p53 protein expression was detected in 85 (61%) of 139 patients, being heterogeneous and focal in the majority of specimens. Only four specimens displayed homogeneous nuclear accumulation of p53 protein. Disease progression, most commonly prostate-specific antigen elevation, was noted in 46 (33%) patients, with 39 (85%) having positive p53 protein IHC stains. Conversely, 93 (67%) of 139 have not recurred, with 46 (49%) having positive p53. Of all 54 p53-negative patients, 47 (87%) have had no disease recurrence. An increased p53 protein IHC stain was associated with a higher pathological stage (T1 and T2, 51% versus >/=T3, 69%) and Gleason score 2-4, 17%; 5-7, 72%; and 8-10, 87.5%). Despite these associations, p53 IHC staining was an independent predictor of disease-free survival in a multivariate analysis of p53, age, race, stage, and grade. This study revealed that a majority of clinically localized prostate cancers heterogeneously express elevated nuclear levels of p53 protein in at least a subset of malignant cells, and that this expression is an independent predictor of disease progression in prostate cancer patients after radical prostatectomy.

2/3,AB/9
DIALOG(R)File 155:MEDLINE(R)

11579097 99011009 PMID: 9796985
Complement factor H or a related *protein* is a *marker* for transitional cell *cancer* of the bladder.
Kinders R; Jones T; Root R; Bruce C; Murchison H; Corey M; Williams L; Enfield D; Hass G M
BION Diagnostic Sciences, Redmond, Washington 98052, USA. Clinical cancer research - an official journal of the American Association for Cancer Research (UNITED STATES) Oct 1998, 4 (10) p2511-20, ISSN 1078-0432 Journal Code: 9502500
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The BTAstat and BTA TRAK tests are new immunoassays that detect and measure an antigen in the urine of individuals diagnosed with bladder cancer. As described in this report, the monoclonal antibodies used in these kits were developed by immunizing mice with partially purified protein preparations derived from the urine of patients with bladder cancer. The antigen that is recognized by the monoclonal antibodies was purified from the urine of bladder cancer patients by immunoaffinity chromatography and identified as being either complement factor H (FH) or a closely related protein (CFHrp) by partial amino acid sequence analysis. Like serum FH, the urine antigen was demonstrated to have a complement factor C3b binding site and to accelerate the degradation of C3b in the presence of complement factor I. The culture supernatants from several human bladder, cervical, and renal cancer cell lines contained antigen as determined by immunoassay, and antigen affinity-purified from HeLaS3 culture media was shown to have FH activity. Moreover, the cell lines were shown to make products of the expected sizes by reverse transcription-PCR using FH-specific primers. In contrast, normal human epithelial keratinocytes, a myeloid leukemia cell line, and the colon cancer line LS174T were negative for production of a FH-like protein (CFHrp). We propose that the expression of proteins with FH-like activities

[redacted]

may confer a selective growth advantage to cancer cells in vivo by decreasing complement activity, thus aiding their escape from lysis by immune surveillance. Identification of these proteins as cancer products also suggests avenues of chemotherapy or immunotherapy of some cancers.

2/3,AB/10
DIALOG(R)File 155:MEDLINE(R)
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10961527 97314180 PMID: 9170522
Evaluation of urinary NMP22 (nuclear matrix *protein* 22) as a diagnostic *marker* for urothelial *cancer* --screening for urothelial *cancer* in patients with microscopic hematuria. NMP Study Group]
Akaza H; Miyanaga N; Tsukamoto T; Ishikawa S; Noguchi R; Ohtani M; Kawabe K; Kubota Y; Fujita K; Obata K; Hirao Y; Kotake T; Ohmori H; Kumazawa J; Koiso K
Dept. of Urology, University of Tsukuba.
Gan to kagaku ryoho. Cancer & chemotherapy (JAPAN) May 1997, 24 (7) p837-42, ISSN 0385-0684 Journal Code: 7810034
Document type: Clinical Trial; Journal Article; Multicenter Study ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed
This study was undertaken to determine the clinical usefulness of NMP22 (Nuclear Matrix Protein 22) as a urinary marker for the screening of urothelial cancer in patients with microscopic hematuria, especially in comparison with that of voided urine cytology. Urinary NMP22 values were determined for 183 patients with microscopic hematuria by use of a UNMP22 Test kit, which is based on an enzyme-linked immunosorbent assay. All patients were entered in this study before cystoscopy was performed, and were evaluated for NMP22 values and voided urine cytology simultaneously from the same urine samples. Of the 183 patients with microscopic hematuria, 14 cases of urothelial cancer were detected. For the other cases, 65 were of benign diseases and 104 were designated NED (No Evidence of Disease). The median NMP22 values for urothelial cancer, benign diseases, and NED were 26.5 U/ml (95% CI: 18.5-228.2; 4.9 U/ml (95% CI: 3.6-8.3), and 5.9 U/ml (95% CI: 4.8-6.5), respectively. The urinary NMP22 value for urothelial cancer was significantly higher than for benign diseases and NED. When the cut-off value of urinary NMP22 was set at 12 U/ml, the positive rate of NMP22 for urothelial cancer was 85.7%, significantly higher than the 50% positive rate by voided urine cytology. This study indicates that urinary NMP22 is a useful tool for the screening of urothelial cancer in patients with microscopic hematuria.

2/3,AB/11
DIALOG(R)File 155:MEDLINE(R)
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10961526 97314179 PMID: 9170521
Evaluation of urinary NMP22 (nuclear matrix *protein* 22) as a diagnostic *marker* for urothelial *cancer*--NMP22 as a urinary *marker* for surveillance of bladder *cancer*. NMP22 Study Group] Akaza H; Miyanaga N; Tsukamoto T; Ishikawa S; Noguchi R; Ohtani M; Kawabe K; Kubota Y; Fujita K; Obata K; Hirao Y; Kotake T; Ohmori H; Kumazawa J; Koiso K
Dept. of Urology, University of Tsukuba.
Gan to kagaku ryoho. Cancer & chemotherapy (JAPAN) May 1997, 24 (7) p829-36, ISSN 0385-0684 Journal Code: 7810034
Document type: Clinical Trial; Journal Article; Multicenter Study ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed
This study was undertaken to determine the clinical usefulness of NMP22 (Nuclear Matrix Protein 22) as a urinary marker for the surveillance of bladder cancer, especially in comparison with that of voided urine cytology. Urinary NMP22 values were determined for 144 patients with histologically diagnosed bladder cancer, 65 patients with other urological cancers, and 171 healthy volunteers by use of a UNMP22 Test kit, which is based on an enzyme-linked immunosorbent assay. All bladder cancer patients were evaluated for urinary NMP22 values and voided urine cytology simultaneously from the same urine samples. Based on the data from the bladder cancer patients and the healthy volunteers, the cut-off value was set at 12 U/ml. The median urinary NMP22 value for the bladder cancer patients was 17.8 U/ml (95% CI: 13.1-29.0). The sensitivities of urinary NMP22 and voided urine cytology were 61.1% (88/144) and 33.8% (48/144), respectively, a significant difference ($p < 0.00001$). Multivariate analysis revealed that tumor size affected the urinary NMP22 values. The positive rate by tumor size was 42.3%, 59.1%, and 85.0% for tumors of < 10 mm, 10-30 mm, and > 30 mm, respectively. Urinary NMP22 values decreased postoperatively in 82.9% of the patients. The median NMP22 values for prostate cancer and renal cancer were 4.4 U/ml (95% CI: 2.2-6.7) and 6.2 U/ml (95% CI: 3.6-12.5). The positive rates were 24.2% and 31.3%, respectively, both of which were significantly lower than for bladder cancer. Our multicenter study indicates that urinary NMP22 test is more sensitive than voided urine cytology test for the surveillance of bladder cancer.

2/3,AB/12
DIALOG(R)File 155:MEDLINE(R)
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10947441 97299901 PMID: 9155050

MDM2 gene amplification and expression in non-small-cell lung *cancer*: immunohistochemical expression of its *protein* is a favourable prognostic *marker* in patients without p53 *protein* accumulation.

Higashiyama M; Doi O; Kodama K; Yokouchi H; Kasugai T; Ishiguro S; Takami K; Nakayama T; Nishisho I

Department of Thoracic Surgery, Osaka Medical Center for Cancer and Cardiovascular Diseases (formerly, Center for Adult Diseases, Osaka), Higashinariku, Japan.

British journal of cancer (SCOTLAND) 1997, 75 (9) p1302-8, ISSN 0007-0920 Journal Code: 0370635

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

MDM2 is an oncoprotein that inhibits p53 tumour-suppressor protein. Amplification of the MDM2 gene and overexpression of its protein have been observed in some human malignancies, and these abnormalities have a role in tumorigenesis through inactivation of p53 function. To determine the clinicopathological and prognostic value of MDM2 abnormalities in non-small-cell lung cancer (NSCLC), MDM2 gene amplification and its protein expression status were analysed in surgically resected materials. MDM2 gene amplification was detected in only 2 (7%) of the 30 tested patients. MDM2 protein was found immunohistochemically in a total of 48 (24%) of the 201 patients. MDM2 protein was slightly frequently observed in patients with adenocarcinoma, but its presence or absence was not associated with clinicopathological factors such as T-factor, N-factor, stage, tumour size, differentiation or p53 protein status. Overall, MDM2-positive patients tended to have a better prognosis (P = 0.062). In particular, among immunohistochemically p53-negative patients (n = 110), those with positive MDM2 protein expression showed significantly better prognosis (P = 0.039) and, in a multivariate analysis, MDM2 protein status was a favourable prognostic factor (P = 0.037). In contrast, among p53-positive patients (n = 91), there was no difference in prognosis depending on MDM2 protein status. Thus, in the NSCLC patients studied, MDM2 gene amplification was a minor event, but expression of its protein, which was often observed immunohistochemically, was a favourable prognostic marker, especially among patients without p53 protein accumulation. Further study is needed to determine how MDM2 protein expression results in a better prognosis.

2/3,AB/13

DIALOG(R)File 155:MEDLINE(R)

10944231 97296685 PMID: 9152154

Is parathyroid hormone-related *protein* a sensitive serum *marker* in advanced breast *cancer*?

Pyke C M; Menezes G; Purdie D M; Johnson S; Cowley D

University Department of Surgery, Mater Adult Hospital, Australia. Australian and New Zealand journal of surgery (AUSTRALIA) May 1997, 67 (5) p256-9, ISSN 0004-8682 Journal Code: 0373115

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

BACKGROUND: To compare already used serum markers in advanced breast cancer, namely erythrocyte sedimentation rate (ESR), carcino-embryonic antigen (CEA), and polymorphic epithelial mucins (e.g. CA15-3) with a newer potential marker: parathyroid hormone related protein (PTHrP). METHODS: A study group of 33 patients of proven advanced breast cancer was compared with 11 patients with benign breast lumps who were undergoing surgery, and eight patients with humoral hypercalcaemia of malignancy of non-breast origin. ESR, CA15-3, CEA, PTHrP, parathormone (PTH), liver and renal function were measured using commercially available kits. Using given reference ranges, results were classified into normal versus abnormal, and univariate statistical comparisons were made using Fisher's exact test. For multivariate analysis, absolute serum levels were used, and multivariate logistic regression models were employed. RESULTS: By univariate analysis, only CA15-3 (P = 0.007), and CEA (P = 0.004), were significant markers of metastatic disease. By multivariate analysis the only independently significant serum marker was CA15-3 (P = 0.043). PTHrP was neither a sensitive (22%) nor specific (90.1%) serum marker when compared to CEA or CA15-3. ESR was the most sensitive single serum marker (93%). An incidental finding of elevations of serum parathormone was found in as many patients as in the study group as there were elevations of PTHrP. CONCLUSIONS: PTHrP would not have revealed any patients with metastatic disease that would not have been predicted by any existing tumour markers including CA15-3, CEA and ESR. The finding of elevated PTH in as many patients as PTHrP indicates the possible need for a study inclusive of other polypeptide hormones as markers in advanced breast cancer.

2/3,AB/14

DIALOG(R)File 155:MEDLINE(R)

10879285 97231063 PMID: 9076459

Clinical evaluation of nuclear matrix *protein* 22 (NMP22) in urine as a novel *marker* for urothelial *cancer*.

Miyanaga N; Akaza H; Ishikawa S; Ohtani M; Noguchi R; Kawai K; Koiso K; Kobayashi M; Koyama A; Takahashi T

Department of Urology, University of Tsukuba, Japan.

European urology (SWITZERLAND) 1997, 31 (2) p163-8, ISSN 0302-2838 Journal Code: 7512719
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
OBJECTIVES: This study was undertaken to determine the clinical usefulness of nuclear matrix protein 22 (NMP22) as a novel urine marker for urothelial cancer, particularly, to substitute for voided-urine cytology. METHODS: NMP22 values were determined for 280 patients and 20 healthy volunteers by NMP22 Test Kit based on an enzyme-linked immunosorbent assay. RESULTS: When the cut-off value was set at 10 U/ml, the positive rate of urinary NMP22 for urothelial cancer was 80.9% (38/47), whereas that for posttreatment cases and benign diseases was 35.7% (74/207). When urinary NMP22 and voided-urine cytology were compared, the test for urinary NMP22 showed higher sensitivity than cytology in patients with urothelial cancer. When urinary NMP22 values were determined pre- and postoperatively in patients with urothelial cancer, the postoperative value decreased in all patients, and were below the cut-off value in all except one patient. CONCLUSIONS: Urinary NMP22 is a useful diagnostic marker as a substitute for voided-urine cytology for the surveillance of urothelial cancer.

2/3,AB/15
DIALOG(R)File 155:MEDLINE(R)

10660180 97008868 PMID: 8855985
pS2 *protein*: a *marker* improving prediction of response to neoadjuvant tamoxifen in post-menopausal breast *cancer* patients. Soubeyran I; Quenel N; Coindre J M; Bonichon F; Durand M; Wafflart J; Mauriac L
Institut Bergonie, Comprehensive Cancer Center, Bordeaux, France. British journal of cancer (SCOTLAND) Oct 1996, 74 (7) p1120-5, ISSN 0007-0920 Journal Code: 0370635
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Tamoxifen as sole initial therapy is gaining importance in the management of post-menopausal breast cancer patients. Age oestrogen (ER) and progesterone (PR) receptor status are accurately considered to select patients for hormonal treatment. However, additional markers are needed. By immunohistochemistry (IHC), we studied tumour expression of ER, PR, pS2, c-erbB-2 and glutathione S-transferase pi (GST pi) on initial core biopsies of 208 post-menopausal patients with a non-metastatic invasive ductal carcinoma, treated by neoadjuvant tamoxifen therapy. A good response to tamoxifen was defined as tumoral regression > or = 50% (110 patients). Relationship between response and age, tumour size, T, N, histological grade, ER and PR contents evaluated by radioimmunoassay, ER, PR, pS2, c-erbB-2 and GST pi expression evaluated by IHC were studied. Univariate and multivariate analysis showed that tumoral regression was linked only to pS2 (P = 0.004) and ER (P = 0.018) IHC expression. According to the immunohistochemical profile, three groups could be defined: pS2- and ER-positive tumours, pS2- or ER-positive tumours and pS2- and ER-negative tumours with response rates of 60%, 45% and 8% respectively. Although prospective studies are needed to confirm these results, we conclude that pS2 and ER immunohistochemical status are useful tools for predicting tumour regression with neoadjuvant tamoxifen in post-menopausal breast carcinoma patients.

2/3,AB/16
DIALOG(R)File 155:MEDLINE(R)

10546668 96358379 PMID: 8761372
A retrospective study of high mobility group *protein* I(Y) as progression *marker* for prostate *cancer* determined by in situ hybridization.
Tamimi Y; van der Poel H G; Karthaus H F; Debruyne F M; Schalken J A Department of Urology/Urological Research Laboratory, University Hospital Nijmegen, The Netherlands.
British journal of cancer (SCOTLAND) Aug 1996, 74 (4) p573-8, ISSN 0007-0920 Journal Code: 0370635
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
In a previous study using RNA in situ hybridisation (RISH), we found a significant correlation between high mobility group protein I/Y, [HMG-I(Y)] mRNA expression and tumour stage and grade in prostate cancer patients, suggesting that HMG-I(Y) might be a potential prognostic marker in prostate cancer. However, our clinical follow-up was limited because cryopreserved material was used. Assessing the potential prognostic value of this molecule is of importance because the clinical course of prostate cancer patients remains unpredictable. Here we describe our results on paraffin-embedded archival material from a group of 102 patients undergoing radical prostatectomy. These were evaluated for the presence of HMG-I(Y) using RISH, and a follow-up of 12-92 months (average 53 months) was available. In 2 of 14 prostate cancers in which the predominant histological pattern was of Gleason grade 1-2, a high HMG-I(Y) expression was observed, whereas in 19 of 23 Gleason grade 3, and 34 of 35 Gleason grade 4-5 tumours, high HMG-I(Y) mRNA levels were detected (chi-square = 38.78, P < 0.0001).

Moreover, of tumours that expressed high HMG-I(Y) levels, 25% were organ confined (T1-2), in contrast to 74.5% of the invading tumours (T3, chi-square = 15.8, P < 0.001). Furthermore, 87% of recurrent tumours showed high HMG-I(Y) expression. However, a multivariate regression analysis including Gleason grade, clinical tumour stage, HMG-I(Y) expression and prostate-specific antigen (PSA) levels showed Gleason grade as the most accurate predictor of progression. High HMG-I(Y) levels measured by RISH were indicative of a worse prognosis, albeit that additional value over the more subjective grading methods was not evident.

2/3,AB/17
DIALOG(R)File 155:MEDLINE(R)

10418517 96224883 PMID: 8635085
Prognostic value of preoperative immunosuppressive acidic *protein* in patients with gastric carcinoma. Findings from three independent clinical trials. Tumor *Marker* Committee for the Study Group of Immunochemotherapy with PSK for Gastric *Cancer*.
Sakamoto J; Teramukai S; Koike A; Saji S; Ohashi Y; Nakazato H Department of Surgery, Aichi Prefectural Hospital, Okazaki, Japan. Cancer (UNITED STATES) Jun 1 1996, 77 (11) p2206-12, ISSN 0008-543X Journal Code: 0374236
Document type: Journal Article; Meta-Analysis
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
BACKGROUND. Immunosuppressive acidic protein (IAP) has been reported to have close correlation with the impairment of host immune response. To evaluate the significance of IAP in clinical studies, the prognostic value of preoperative IAP was investigated in clinical trials of patients with gastric carcinoma after curative resection. METHODS. An appropriate IAP threshold value of 580 micrograms/mL was determined using Cox's proportional hazards model. Five-year survival rates were estimated for high and low IAP groups in three different clinical studies. Meta-analysis was performed based on individual patient data, and summarized hazard ratios were estimated using a stratified proportional hazards model. RESULTS. Meta-analysis of the three clinical trials demonstrated that patients with preoperative IAP levels above the threshold had significantly poorer cancer related survival (P = 0.0039) and absolute survival (P = 0.0023), even after adjustment for the major prognostic factors. CONCLUSIONS. Gastric carcinoma patients with an IAP value above the threshold level of 580 micrograms/mL have a higher risk of cancer death and absolute death than patients with an IAP value below the threshold value.

2/3,AB/18
DIALOG(R)File 155:MEDLINE(R)

10364180 96167404 PMID: 8599514
Evaluation of oncofetal *protein*-related mRNA transport activity as a potential early *cancer* *marker* in dogs with malignant neoplasms.
Stromberg P C; Schumm D E; Webb T E; Ward H; Couto C G
Department of Veterinary Pathobiology, Ohio State University, Columbus 43210, USA.
American journal of veterinary research (UNITED STATES) Dec 1995, 56 (12) p1559-63, ISSN 0002-9645 Journal Code: 0375011
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
A 55-kd protein with mRNA transport activity found in fetal rat liver cells and plasma from mice, rats, and human beings with malignant neoplasms has been designated oncofetal protein 55 (OFP55). Monoclonal antibody produced to rat OFP55 cross-reacts with human OFP55. Using this monoclonal antibody in a bioassay measuring mRNA transport stimulated by OFP55, we tested the plasma from 19 dogs with a variety of malignant neoplasms, including carcinomas, sarcomas, lymphomas, and melanomas, and compared the results with plasma from 20 clinically normal dogs without evidence of neoplasia. The mean mRNA transport activity from the group of dogs with malignant neoplasms was 0.43 +/- 0.28%/mg of protein. Mean transport activity from the group of control dogs was 0.04 +/- 0.02%/mg of protein. These means were significantly different (P < 0.0001). The degree of overlap between these 2 groups in their OFP55-related mRNA transport activity was minimal, and measurement of this protein appears to have potential for the early detection of malignant neoplasms in dogs.

2/3,AB/19
DIALOG(R)File 155:MEDLINE(R)

10019948 21953771 PMID: 11956642
Effectiveness of immunochemotherapy with PSK, a *protein*-bound polysaccharide, in colorectal *cancer* and changes of tumor *marker*.
Kudo Shinei; Tanaka Jun-Ichi; Kashida Hiroshi; Tamegai Yoshiro; Endo Shungo; Yamano Hiro-O
Digestive Disease Center, Showa Northern Yokohama Hospital, School of Medicine, Showa University, Chigasaki, Tsuzuki-ku, Yokohama-city, Kanagawa 224-8503, Japan. kudos@med.showa-u.ac.jp
Oncology reports (Greece) May-Jun 2002, 9 (3) p635-8, ISSN 1021-335X Journal Code: 9422756
Document type: Journal Article
Languages: ENGLISH

Main Citation Owner: NLM
Record type: Completed
In the present study, curatively resected patients of colorectal cancer at pTNM stages II and III were selected. Patients receiving postoperative combined PSK, a protein-bound polysaccharide, and fluoropyrimidine therapy (PSK + chemotherapy group) were compared with patients receiving postoperative chemotherapy alone (chemotherapy group) during the same period of study. Three-year disease-free survival rates were evaluated and the postoperative changes of serum type IV collagen level were investigated. The results confirmed a significant improvement of the three-year disease-free survival rate in the PSK + chemotherapy group compared to the chemotherapy group, suggesting that PSK is useful as postoperative prognosis control including relapse prevention for colorectal cancers at pTNM stage II and III. Analysis of the postoperative changes of serum type IV collagen level showed significantly higher levels in the chemotherapy group than in the PSK + chemotherapy group, and this tendency was sustained for 12 months after surgery. This observation is speculated to be caused by inhibition of vascular basement membrane destruction by PSK, leading to inhibition of release of type IV collagen into the blood. These results indicated a possibility that combined PSK and chemotherapy inhibited metastasis, thereby reducing the risk of relapse and leading to improvement of the three-year disease-free survival rate.

2/3,AB/20
DIALOG(R)File 155:MEDLINE(R)

09963708 21887581 PMID: 11889694
Expression of the *protein* *marker* p16INK4a in the cervix uteri *cancer*]
Ekspressiia belkovogo markera p16INK4a v rake sheiki matki. Volgareva G M; Zavalishina L E; Frank G A; Andreeva Iu Iu; Petrov A N; Kiselev F L; Spitkovskii D D
N.N. Blokhin Cancer Research Center, 115478, Moscow.
Arkhiv patologii (Russia) Jan-Feb 2002, 64 (1) p22-4, ISSN 0004-1955 Journal Code: 0370604
Document type: Journal Article ; English Abstract
Languages: RUSSIAN
Main Citation Owner: NLM
Record type: Completed
Immunohistochemical study was carried out of 18 cervical carcinomas (13 squamous and 5 adenomatous) and of 3 cases of cervical intraepithelial dysplasia. Formalin-fixed paraffin-embedded tissue samples from biopsies as well as from surgical material were used. Staining was performed with monoclonal antibodies to protein p16INK4a. Cytologic smears of epithelial cervical cells from 7 healthy women were taken as a negative control. The reference group consisted of 5 cancer patients with other tumors (breast cancer, B-cell lymphoma). Overexpression of p16INK4a was registered in cervical cancer.

2/3,AB/21
DIALOG(R)File 155:MEDLINE(R)

09687196 21479182 PMID: 11595709
Nuclear expression of the Y-box binding *protein*, YB-1, as a novel *marker* of disease progression in non-small cell lung *cancer*. Shibahara K; Sugio K; Osaki T; Uchiumi T; Maehara Y; Kohno K; Yasumoto K; Sugimachi K; Kuwano M
Departments of Medical Biochemistry, Graduate School of Medical Sciences, Kyushu University, 3-1-1 Maidashi, Fukuoka 812-8582, Japan. Clinical cancer research - an official journal of the American Association for Cancer Research (United States) Oct 2001, 7 (10) p3151-5, ISSN 1078-0432 Journal Code: 9502500
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Transcription factor Y-box binding protein 1 (YB-1) that binds to the inverted CCAAT box is involved not only in transcription of various genes but also in cell proliferation and DNA repair. We determined whether localization of YB-1 in either the nucleus or cytoplasm could serve as a prognostic marker for patients with non-small cell lung cancer (NSCLC). In 196 NSCLC patients, expression of YB-1 protein in the nucleus or cytoplasm was immunohistochemically evaluated. Of the 196 tumors examined, 88 (44.9%) were positive for YB-1 expression in the nucleus. Nuclear YB-1 expression significantly correlated with T factor, lymph node metastasis, and stage of the disease. Patients with a nuclear YB-1 tumor had a poorer prognosis than did those with a cytoplasmic YB-1 tumor in all of the NSCLC patients (P = 0.0494) and in patients with squamous cell carcinoma (P = 0.0313) but not in patients with adenocarcinomas. Nuclear localization of the YB-1 protein may prove to be an important factor of disease progression for patients with NSCLC, in particular, in cases of squamous cell carcinoma.

2/3,AB/22
DIALOG(R)File 155:MEDLINE(R)

09675605 21467045 PMID: 11583354
Evaluation of nuclear matrix *protein* 22 (NMP22) as a tumor *marker* in the detection of bladder *cancer*.
Oge O; Atsu N; Kendi S; Ozen H
Department of Urology, Hacettepe University School of Medicine, Ankara, Turkey. omeroge@hotmail.com
International urology and nephrology (Hungary) 2001,

32 (3) p367-70, ISSN 0301-1623 Journal Code: 0262521
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
We prospectively evaluated the performance of urinary NMP22 test in the detection of transitional carcinoma (TCC) of the bladder. Urine samples were obtained from 39 patients with known bladder cancer, 37 patients with primary hematuria. 18 with benign urological conditions and 20 healthy subjects. Overall sensitivity and specificity of NMP22 with reference value of 10 U/ml was 72 and 73%, respectively. Sensitivity for pT1 and pT2 tumors was 83%, whereas that for pTa tumors was 55%. When the test was determined before and after transurethral resection (TUR) of bladder tumor, it was shown that the TUR effected the NMP22 level. Urinary NMP22 was highly sensitive for high-risk bladder cancer. However, the sensitivity of the test is somewhat lower in low grade and stage tumors. Additionally, the effect of previous resection limits its value in the follow up of patients with superficial tumors. The larger series with longer follow up may lead us to determine the time to neglect the effect of TUR on NMP22 and the test kit should be upgraded by the manufacturer to exclude the false positive results due to inflammatory conditions.

2/3,AB/23
DIALOG(R)File 155:MEDLINE(R)
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09588212 21371884 PMID: 11479201
Overexpression of Id-1 *protein* is a *marker* for unfavorable prognosis in early-stage cervical *cancer*.
Schindl M; Oberhuber G; Obermair A; Schoppmann S F; Karner B; Birner P Institute of Clinical Pathology, University of Vienna, Waeringer Guertel 18-20, A-1090 Vienna, Austria.
Cancer research (United States) Aug 1 2001, 61 (15) p5703-6, ISSN 0008-5472 Journal Code: 2984705R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Inhibitor of differentiation/DNA binding (Id) proteins are transcription factors, involved in cell cycle regulation and neoangiogenesis. Using immunohistochemistry, we investigated the prognostic influence of Id-1, Id-2, and Id-3 expression in 89 patients with cervical cancer stage pT(1b). In univariate and multivariate analysis, patients with strong or moderate expression of Id-1 had a significant shorter overall survival time (P = 0.0144, log-rank test) and disease-free survival time (P = 0.0107, log-rank test) compared with those with low or absent Id-1 expression. Id-1 expression is an independent prognostic marker in early-stage cervical cancer.

2/3,AB/24
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

09526190 21304922 PMID: 11411098
Clinical evaluation of urinary nuclear matrix *protein* 22 as a *marker* for bladder *cancer*]
Kurokawa S; Morita T; Muraishi O; Tokue A
Department of Urology, Jichi Medical School.
Hinyokika kiyo. Acta urologica Japonica (Japan) Apr 2001, 47 (4) p247-50, ISSN 0018-1994 Journal Code: 0421145
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed
The purpose of this study is to evaluate the clinical usefulness of urinary nuclear matrix protein 22 (NMP22) as a marker for bladder cancer. We examined the positive rates of NMP22 test, urinary cytology and bladder tumor antigen (BTA) test, and compared the positive rate of NMP22 test with that in urinary cytology and BTA test. Urine samples were obtained from 50 patients with histologically confirmed bladder cancer before the treatment. The samples were examined by NMP22 test, urinary cytology and BTA test. In 50 patients with bladder cancer, the overall positive rate was 40% for NMP22 test, 40% for urinary cytology, and 16% for BTA test. A combination of NMP22 test and urinary cytology showed a significantly higher positive rate (54%) as compared to NMP22 test or urinary cytology alone. When NMP22 test and urinary cytology were compared for tumor size, number, shape, stage and grade, NMP22 test showed a significant higher positive rate than urinary cytology in grade 1 bladder cancer. In conclusion, although NMP22 test and urinary cytology gave a similar positive rate, a combination of NMP22 test and urinary cytology is more useful than the NMP22 test or urinary cytology alone for monitoring of bladder cancer.

2/3,AB/25
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

09418712 21186125 PMID: 11291077
MLH1 and MSH2 *protein* expression as a pre-screening *marker* in hereditary and non-hereditary endometrial hyperplasia and *cancer*. Berends M J; Hollema H; Wu Y; van Der Sluis T; Mensink R G; ten Hoor K A; Sijmons R H; de Vries E G; Pras E; Mourits M J; Hofstra R M; Buys C H; Kleibeuker J H; van Der Zee A G
Department of Gastroenterology, University Hospital

Groningen, Groningen, The Netherlands.
International journal of cancer. Journal international du cancer (United States) May 1 2001, 92 (3) p398-403, ISSN 0020-7136 Journal Code: 0042124
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The predictive value of MLH1 or MSH2 protein expression for the presence of truncating germline mutations was examined in benign and (pre)malignant endometrial samples from 3 patient groups: (I) 10 endometrial cancer patients from hereditary non-polyposis colorectal cancer (HNPCC) families with (n = 6) or without (n = 4) a known germline mutation; (II) 15 women from HNPCC families with (n = 7) or without (n = 8) a known germline mutation, who underwent endometrial sampling for non-malignant reasons; (III) 38 endometrial cancer patients <50 years of age, without HNPCC family history. Immunostaining for MLH1 and MSH2 was performed on paraffin-embedded sections. In group III, tumor DNA was examined for microsatellite instability (MSI) and MLH1, MSH2 and MSH6 mutation analysis was carried out. In 6/6 MLH1/MSH2 mutation carriers with endometrial cancer (group I), concordance was found between protein loss in the tumor and the corresponding mutation. In 3 MLH1 mutation carriers, MLH1 protein loss was also observed in concurrent endometrial hyperplasia. In group II, no protein loss was detected in normal endometrial tissue samples; in 3/4 patients with endometrial hyperplasia, MLH1/MSH2 protein loss was observed. In group III, protein loss was detected in 12/38 patients (9 MLH1, 3 MSH2), while in 3/11 patients with concurrent endometrial hyperplasia protein loss was also observed in the hyperplasia. MSI analysis in group III revealed 26 MSI-low and 12 MSI-high tumors. Mutation analysis in 28/38 patients showed only 1 missense MSH6 and no MLH1 or MSH2 germline mutations. In group III, loss of MLH1/MSH2 protein expression was not related to the presence of MSI or MLH1/MSH2 germline mutations. In conclusion, MLH1 or MSH2 protein loss in HNPCC-related endometrial neoplasia is strongly related to corresponding germline mutations. This relation was not clearly present in young sporadic endometrial cancer patients. Immunohistochemical pre-screening of the MLH1 and MSH2 proteins in endometrial hyperplasia or cancer can thus be helpful in HNPCC families. Frequent loss of MLH1 or MSH2 protein in endometrial hyperplasia indicates that this loss is an early event in endometrial carcinogenesis. Copyright 2001 Wiley-Liss, Inc.

2/3,AB/26
DIALOG(R)File 155:MEDLINE(R)

09322687 21079788 PMID: 11212264
Glycophosphatidylinositol-anchored *protein* deficiency as a *marker* of mutator phenotypes in *cancer*.
Chen R; Eshleman J R; Brodsky R A; Medof M E
Department of Pathology, Case Western Reserve University, Cleveland, Ohio 44106, USA.
Cancer research (United States) Jan 15 2001, 61 (2) p654-8, ISSN 0008-5472 Journal Code: 2984705R
Contract/Grant No.: AI23598; AI; NIAID; HL55773; HL; NHLBI Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Phosphatidylinositol glycan-A (PIGA) is a gene that encodes an element required for the first step in glycosylphosphatidylinositol (GPI) anchor assembly. Because PIGA is X-located, a single mutation is sufficient to abolish cell surface GPI-anchored protein expression. In this study, we investigated whether mutation of the PIGA gene could be exploited to identify mutator (Mut) phenotypes in cancer. We examined eight Mut colon cancer lines and four non-Mut colon cancers as controls. In every case, flow cytometric analyses of cells sorted for low fluorescence after staining for GPI-linked CD59 and CD55 revealed negative peaks in the Mut lines but not in the controls. Single cell cloning of purged and sorted GPI-anchor- HCT116 cells and sequencing of the PIGA gene in each clone uniformly showed mutations. Pretreatment of the Mut lines with anti-CD55 or anti-CD59 antibodies and complement or with the GPI-anchor-reactive bacterial toxin aerolysin enriched for the GPI-anchor- populations. Expansion of purged GPI-anchor+ cells in the Mut lines and analyses using aerolysin in conjunction with flow cytometry yielded PIGA gene mutation frequencies of 10(-5) to 10(-4), values similar to the mutation frequencies of the hprt gene. This novel approach allows for the detection of as yet undescribed repair or replication defects and in addition to its considerably greater ease of use than existing techniques and in principle would not require the production of cell lines.

2/3,AB/27
DIALOG(R)File 155:MEDLINE(R)

08816777 20100024 PMID: 10636069
Granulocyte *marker* *protein* is increased in stools from rats with azoxymethane-induced colon *cancer*.
Kristinsson J; Roseth A G; Sundset A; Nygaard K; Loberg E M; Paulsen J E; Aadland E; Fagerhol M K
Dept. of Surgery and Medicine, Aker University Hospital, Oslo, Norway. Scandinavian journal of gastroenterology (NORWAY) Dec 1999, 34 (12) p1216-23, ISSN 0036-5521 Journal Code: 0060105
Document type: Journal Article

[redacted]

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
BACKGROUND: We wanted to investigate the relationship between the fecal levels of granulocyte marker protein (GMP) and the presence of aberrant crypt foci (ACF) and colorectal cancer in rats given injections of azoxymethane (AOM) and fed either of two different diets, a basal diet plus 20% corn oil or 20% beef suet, respectively. METHODS: The rats received intraperitoneal injections of AOM, 15 mg/kg, once weekly for 6 weeks and were killed after 22 weeks. RESULTS: In the group fed beef suet 17 of 19 rats developed colon cancer, whereas in the group fed corn oil 4 of 14 rats developed cancer. None of the 20 control rats fed either the beef suet or corn oil diets developed cancer or aberrant crypts, and GMP remained unchanged. Surprisingly, the numbers of ACF were significantly higher (467 versus 295; P = 0.004) in the group fed corn oil than in the group fed beef suet. On the other hand, the size (crypts/focus) of the ACF was significantly higher (P = 0.03) in the beef suet group. Furthermore, fecal GMP was significantly higher in the beef suet group than in the corn oil group after 18 weeks, and this difference increased further toward the end of the study. GMP was greatly increased in all rats with colorectal cancer. CONCLUSIONS: Fecal GMP may have provided us with a valuable tool for further studies of the induction and progression of neoplasia in rats and, possibly, in mice, since the anti-GMP antibody cross-reacts with feces extracts from mice.

2/3,AB/28
DIALOG(R)File 155:MEDLINE(R)

08760989 20042076 PMID: 10576657
The potential role for prolactin-inducible *protein* (PIP) as a *marker* of human breast *cancer* micrometastasis. Clark J W; Snell L; Shiu R P; Orr F W; Maitre N; Vary C P; Cole D J; Watson P H
Department of Pathology, University of Manitoba, Faculty of Medicine, Winnipeg, Canada.
British journal of cancer (SCOTLAND) Nov 1999, 81 (6) p1002-8, ISSN 0007-0920 Journal Code: 0370635
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The prolactin-inducible protein (PIP/GCPD15) is believed to originate from a limited set of tissues, including breast and salivary glands, and has been applied as a clinical marker for the diagnosis of metastatic tumours of unknown origin. We have investigated the potential role of PIP mRNA as a marker of human breast cancer metastasis. Using reverse transcription polymerase chain reaction and Southern or dot blot analysis, PIP mRNA was detected in 4/6 breast cell lines, independent of oestrogen receptor (ER) status. In breast primary tumours (n = 97), analysed from histologically characterized sections, PIP mRNA was detected in most cases. Higher PIP mRNA levels correlated with ER+ (P = 0.0004), progesterone receptor positive (PR+) (P = 0.0167), low-grade (P = 0.0195) tumours, and also PIP protein levels assessed by immunohistochemistry (n = 19, P = 0.0319). PIP mRNA expression was also detectable in 11/16 (69%) of axillary node metastases. PIP mRNA expression, however, was also detected in normal breast duct epithelium, skin, salivary gland and peripheral blood leucocyte samples from normal individuals. We conclude that PIP mRNA is frequently expressed in both primary human breast tumours and nodal metastases. However, the presence of PIP expression in skin creates a potential source of contamination in venepuncture samples that should be considered in its application as a marker for breast tumour micrometastases.

2/3,AB/29
DIALOG(R)File 155:MEDLINE(R)

08507953 95196229 PMID: 7889536
pS2--a new cytosolic *protein* recognized by monoclonal antibodies as a *marker* of hormone sensitivity in breast *cancer*. Correale M; Abbate I; Paradiso A; Schittulli F; Dragone C D; Tedone T; Gargano G; Catino A M; Musci M D; De Lena M
RIA Laboratory, Oncology Institute of Bari, Italy.
Cell biophysics (UNITED STATES) Jan-Jun 1993, 22 (1-3) p101-10, ISSN 0163-4992 Journal Code: 8002185
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Using a new immunoradiometric assay (ELSA pS2 Cis-France), a total of 200 cytosols obtained from primary breast tumors were examined for pS2 content, which is an estrogen-regulated protein actually studied as a marker of hormone sensitivity and favorable prognostic factor in breast cancer. In our patient group, the median pS2 value corresponding to 5.3 ng/mg of cytosolic proteins was used as cutoff. pS2 content was not related to menopause status, tumor size, or nodal involvement, whereas a positive correlation was found between pS2 and ER/PgR status. Moreover, the association of pS2 with steroid receptors seems to identify subgroups of patients better than ER/PgR alone.

2/3,AB/30
DIALOG(R)File 155:MEDLINE(R)

08403010 95090990 PMID: 7998355

Tetranectin, a plasma and tissue *protein*--a prognostic *marker* of breast and ovarian *cancer*]
Tetranektin, et plasma- og vaevsprotein--en prognostisk markor for mamma- og ovariekarcinom.
Hogdall C K; Christensen L; Clemmensen I
Statens Seruminstitut, Kobenhavn, klinisk biokemisk afdeling, Rigshospitalet.
Ugeskrift for laeger (DENMARK) Oct 17 1994, 156 (42) p6190-5, ISSN 0041-5782 Journal Code: 0141730
Document type: Journal Article; Review; Review, Tutorial ; English Abstract
Languages: DANISH
Main Citation Owner: NLM
Record type: Completed
A new plasma protein, tetranectin, was discovered in 1986. It is composed of four non-covalently linked identical peptide chains, each with a molecular weight of 20 kDa. The protein structure is known and it has been found to bind to plasminogen, Ca++ and sulphated polysaccharides. All normal epithelial and mesenchymal cells contain tetranectin in their cytoplasm, but tetranectin is not seen in normal extracellular matrix. The concentration of tetranectin in blood from healthy individuals is about 10 mg/1 with slight sex and age variations. The biological function of the protein is still unknown. The amount of tetranectin in the blood is reduced in patients with various cancer diseases. The degree of tetranectin reduction in the blood from patients with ovarian carcinoma and metastasizing breast carcinoma correlates with survival. While tetranectin is absent in normal extracellular matrix, it is found extracellulary in granulation tissues and in some carcinomas of the breast and the ovary. Lifetables of patients with ovarian carcinoma show that high concentrations of extracellular tetranectin is associated with a poor prognosis. Tetranectin may be a new prognostic marker which should be included in future clinical studies evaluating the prognosis for cancer patients.

2/3,AB/31
DIALOG(R)File 155:MEDLINE(R)

08388858 95076834 PMID: 7985536
Does a novel form of the breast *cancer* *marker* *protein*, MUC1, act as a receptor molecule that modulates signal transduction? Wreschner D H; Zrihan-Licht S; Baruch A; Sagiv D; Hartman M L; Smorodinsky N; Keydar I
Dept. of Cell Research and Immunology, Tel Aviv University, Ramat Aviv, Israel.
Advances in experimental medicine and biology (UNITED STATES) 1994, 353 p17-26, ISSN 0065-2598 Journal Code: 0121103
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Molecular analysis of a protein highly expressed in human breast cancer, indicates the presence of a polymorphic tandem repeat domain that encodes a conserved 20 amino acid repeat motif rich in serine and threonine residues that in the mature protein, designated MUC1, are linked via O-glycosidic linkages to sugar residues. Recent studies performed in our laboratory have led to the molecular characterization of a novel MUC1 repeat array minus mRNA, generated by an alternative splicing event that deletes the central tandem repeat array and its flanking sequences. The conceptually derived amino acid sequence of the novel MUC1 protein shows that it is identical with the previously reported transmembrane MUC1 amino acid sequence except for the deletion of the central 20 amino acid tandem repeat array and sequences immediately flanking the repeat array. This indicates that the novel MUC1 protein, which is devoid of the "hallmark" feature of mucins, the tandem repeat array, may be functionally different to the much larger, heavily glycosylated polymorphic repeat array containing MUC1 proteins, that affect cell-cell interactions. Based on an analysis of its peptide sequence, we propose the hypothesis that the novel MUC1 protein may act as a receptor molecule that modulates signal transduction. Preliminary experimental data supports this hypothesis. It appears, therefore, that the MUC1 gene is multifunctional with regard to its protein products- the repeat array containing MUC1 proteins may alter cellular adhesion processes whereas the novel MUC1 protein could be acting as a receptor-like molecule participating in signal transmission.

2/3,AB/32
DIALOG(R)File 155:MEDLINE(R)

07508333 92372037 PMID: 1505966
The gene encoding the human spasmolytic *protein* (SML1/hSP) is in 21q 22.3, physically linked to the homologous breast *cancer* *marker* gene BCEI/pS2.
Tomasetto C; Rockel N; Mattei M G; Fujita R; Rio M C
LGME/CNRS, Institut de Chimie Biologique, Faculte de Medecine, Strasbourg, France.
Genomics (UNITED STATES) Aug 1992, 13 (4) p1328-30, ISSN 0888-7543 Journal Code: 8800135
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The human spasmolytic protein, SML1/hSP, an inhibitor of spasmolytic activity and gastric acid secretion in the pig, has been shown to exhibit homology to the pS2 protein, an estrogen-dependent breast cancer marker. Moreover, SML1/hSP and pS2 are expressed at the same localization in the normal stomach

and during healing of the gastrointestinal tract. Here we report the chromosomal localization, obtained by in situ hybridization, of the hSP gene (SML1) to chromosome 21 at 21q22.3. Using pulsed-field gel electrophoresis, we found SML1 to be within 230 kb of the BCEI/pS2 gene.

2/3,AB/33
DIALOG(R)File 155:MEDLINE(R)

07456247 92319788 PMID: 1535711
An enzyme-linked immunosorbent assay for p65 oncofetal *protein* and its potential as a new *marker* for *cancer* risk assessment in rodents and humans.
Mirowski M; Hanausek M; Sherman U; Adams A K; Walaszek Z; Slaga T J University of Texas M.D. Anderson Cancer Center, Science Park-Research Division, Smithville 78957.
Progress in clinical and biological research (UNITED STATES) 1992, 374 p281-94, ISSN 0361-7742 Journal Code: 7605701
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

2/3,AB/34
DIALOG(R)File 155:MEDLINE(R)

07160785 92022991 PMID: 1833844
Initial experience with placental *protein* 4 (PP-4) as tumor *marker* in cervical and endometrial *cancer*.
Gocze P M; Szabo D G; Than G N; Csaba I F; Keller G; Vahrson H; Bohn H Department of Obstetrics and Gynaecology, University Medical School, Pecs, Hungary.
Strahlentherapie und Onkologie - Organ der Deutschen Rontgengesellschaft ... et al (GERMANY) Sep 1991, 167 (9) p538-44, ISSN 0179-7158 Journal Code: 8603469
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
PP-4, a recently characterized glycoprotein from human placenta was studied using a specific double-antibody radioimmunoassay in sera of 130 volunteers, 74 cervical cancer patients and 43 endometrial cancer patients. Elevated levels (greater than 3 micrograms/l) were found in 35 (47.3%) cervical cancer patients and in 18 (41.9%) endometrial cancer patients. Degree of elevation were not correlated with clinical stage, histology, and histological degree of differentiation. 36 patients with cervical cancer and 20 patients with endometrial cancer were monitored on two to seven occasions during four to 50 weeks. Rising, remaining unchanged of falling levels of PP-4 correlated with progression, stabilization or regression of disease 55.5% in patients with cervical and 65.0% in patients with endometrial cancer. During and some months after external telecobalt irradiation therapy wide range of PP-4 levels were observed in some patients. The study suggest that PP-4 can be regarded as a tumor associated protein which most likely can serve as tumor marker in cervical and endometrial cancer.

2/3,AB/35
DIALOG(R)File 155:MEDLINE(R)

07143261 92005454 PMID: 1717147
Folate-binding *protein* is a *marker* for ovarian *cancer*. Campbell I G; Jones T A; Foulkes W D; Trowsdale J
Imperial Cancer Research Fund, London, England.
Cancer research (UNITED STATES) Oct 1 1991, 51 (19) p5329-38, ISSN 0008-5472 Journal Code: 2984705R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
We describe the isolation of a complementary DNA (cDNA) sequence encoding the ovarian cancer-associated antigen recognized by monoclonal antibody MOv18 and its identification as a high-affinity folate-binding protein (FBP). Functional cDNA clones were isolated using mRNA from the ovarian carcinoma cell line SKOV3 and colon carcinoma cell line HT29, by transient expression in WOP cells and selection of expressing cells by adhesion to antibody-coated magnetic beads. The cDNAs differed in the lengths of 5'- and 3'-noncoding regions, but they encoded identical peptides. A database search clearly showed them to be adult high-affinity FBPs with amino acid sequences identical with those isolated from normal placenta and several carcinoma cell lines. Reactivity of cell lines with MOv18 was quantitatively consistent with the expression of FBP mRNA. Southern hybridizations show evidence of a family of related genes and/or pseudogenes and were mapped to chromosome 11q13.3-14.1 by fluorescent in situ hybridization using cosmid clones containing part of this region. Also identified were two PstI polymorphisms of four and three alleles, respectively, and a two-allele MspI polymorphism. The folate-binding protein locus was not amplified in any of the 16 carcinoma cell lines tested and in only 1 of 10 serous adenocarcinomas, indicating that overexpression of FBP in ovarian cancer cannot, in general, be due to gene amplification.

2/3,AB/36
DIALOG(R)File 155:MEDLINE(R)

07076618 91317573 PMID: 1860726
Protein kinase C activity as *marker* for colorectal *cancer*.
Sakanoue Y; Hatada T; Kusunoki M; Yanagi H; Yamamura T; Utsunomiya J Second Department of Surgery, Hyogo College of Medicine, Japan. International journal of cancer. Journal international du cancer (UNITED STATES) Jul 30 1991, 48 (6) p803-6, ISSN 0020-7136 Journal Code: 0042124
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Protein kinase C (PKC) activity was measured in normal-appearing colonic mucosa from patients undergoing colonic resection. Comparisons were made between cases with and without colorectal cancers. PKC activity in cytosolic and particulate fractions was significantly reduced in patients with colorectal cancer: 40 +/- 9 and 114 +/- 29 (pmol/min/mg) respectively, compared with patients without cancer; 129 +/- 11 and 250 +/- 38 (pmol/min/mg) (p less than 0.05). Normal-appearing colonic mucosa in patients with cancer showed significantly decreased total PKC activities in the cytosolic and particulate fractions compared with those in patients without cancer (10 +/- 1 and 20 +/- 3 vs. 30 +/- 2 and 33 +/- 6) (pmol/min/g tissue) (p less than 0.05). The cellular distribution (% particulate fraction) of PKC activity in normal-appearing mucosa in patients with cancer (64%) was higher than in patients without cancer (49%) (p less than 0.05). OUr data suggest that PKC activity may be used as a biological marker of risk of developing colorectal cancer or risk of bearing an asymptomatic tumor.

2/3,AB/37
DIALOG(R)File 155:MEDLINE(R)

07068143 91309058 PMID: 1855201
Lung *cancer*-associated *protein* : development and characterization of a new assay that detects a circulating lung *cancer* *marker*.
Maimonis P; Hayes D F; Schaffel S; Kufe D
Laboratory of Clinical Pharmacology, Dana-Farber Cancer Institute, Harvard Medical School, Boston, Massachusetts 02115.
Cancer research (UNITED STATES) Aug 1 1991, 51 (15) p3838-42, ISSN 0008-5472 Journal Code: 2984705R
Contract/Grant No.: CA38879; CA; NCI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
A panel of murine monoclonal antibodies was generated against a high-molecular-weight glycoprotein produced by human lung cancer cells. This lung cancer-associated protein (LCAP) has been shown to circulate in the plasma of patients with lung cancer. Various combinations of MAbs were used in solid-phase enzyme-linked sandwich immunoassays to optimize the detection of LCAP in the plasma of these patients. One of these monoclonal antibodies, designated DF-L1, used both in the solid phase as well as the tracer, was selected to evaluate circulating levels of LCAP in normal subjects and in patients with lung cancer. In 341 normal subjects, the mean LCAP level was 7 units/ml, with 47 (13.8%) and 18 (5.3%) subjects having levels greater than or equal to 15 units/ml and 23 units/ml, respectively. In contrast, 27 of 35 (77.1%) patients with lung cancer had LCAP levels greater than or equal to 23 units/ml. A total of 16 of 19 (84.2%) patients with adenocarcinoma, four of seven (57.1%) patients with squamous cell carcinoma, and four of six (66.7%) patients with small cell carcinoma had levels greater than or equal to 23 units/ml. Moreover, in a small group of patients, serial LCAP levels correlated with clinical course during therapy. The LCAP assay is technically reproducible and unaffected by interfering substances in the blood or by variations in the handling of samples. These results indicate that LCAP is a new and potentially useful marker for the evaluation of patients with lung cancer.

2/3,AB/38
DIALOG(R)File 155:MEDLINE(R)

06865592 91105691 PMID: 1670998
Evaluation of immunoreactivity for erbB-2 *protein* as a *marker* of poor short term prognosis in gastric *cancer*.
Yonemura Y; Ninomiya I; Yamaguchi A; Fushida S; Kimura H; Ohoyama S; Miyazaki I; Endou Y; Tanaka M; Sasaki T
School of Medicine, Kanazawa University, Japan.
Cancer research (UNITED STATES) Feb 1 1991, 51 (3) p1034-8, ISSN 0008-5472 Journal Code: 2984705R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Using a polyclonal antibody that is monospecific for the erbB-2 oncogene product, an immunohistochemical study of the expression of erbB-2 protein was performed in formalin-fixed paraffin-embedded tissue sections from 260 primary gastric cancers. erbB-2 protein expression in which the reaction was localized to the cell membranes was observed in 31 (11.9%) cancers. All nontumor cells and normal gastric epithelium were negative for membrane staining. There was not a significant association between erbB-2 staining and histological

type or venous invasion. erbB-2 protein expression was associated with serosal invasion, lymph node metastasis, and lymphatic invasion. In addition, erbB-2 protein expression correlated with a high number of lymph node metastases. Furthermore, the risk of recurrence in lymph node was over 3 times higher in patients with erbB-2 protein-positive tumors than in those with erbB-2 protein-negative ones. When erbB-2 protein expression and the clinical parameters were entered simultaneously into the Cox regression model, erbB-2 protein expression emerged as an independent prognostic indicator. Patients with erbB-2 protein-positive tumors had 5-fold greater relative risk of death, as compared with those with erbB-2 protein-negative tumors. These results indicate that erbB-2 protein expression is an important independent prognostic indicator in gastric cancer. The high malignant potential of erbB-2 protein-positive tumors may be associated with the very high potential for lymph node metastasis.

2/3,AB/39
DIALOG(R)File 155:MEDLINE(R)

06851805 91091880 PMID: 1702360
Identification of high mobility group *protein* I(Y) as potential progression *marker* for prostate *cancer* by differential hybridization analysis.
Bussemakers M J; van de Ven W J; Debruyne F M; Schalken J A Department of Urology, Radboud University Hospital, Nijmegen, The Netherlands.
Cancer research (UNITED STATES) Jan 15 1991, 51 (2) p606-11, ISSN 0008-5472 Journal Code: 2984705R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
One of the major problems in the diagnosis of localized prostatic tumors is to predict the aggressiveness of an individual tumor, which is presumably associated with chance to progression. In an attempt to find molecular markers that are specific for aggressive prostatic cancer cells, we compared steady-state mRNA levels of progressionally related prostatic tumors. The Dunning R-3327-H subline, a relatively benign rat prostatic tumor, was compared to the therefrom derived highly aggressive MatLyLu tumor by differential hybridization analysis. The differential screening revealed 26 complementary DNA clones that detected transcripts overexpressed in MatLyLu. Upon further screening on the entire panel of Dunning R-3327 sublines, it appeared that three clones (pBUS1, pBUS19, and pBUS30), detected transcripts specifically expressed in metastatic rat prostatic tumors. The expression pattern of pBUS19 and pBUS30 suggested a relation between these complementary DNAs. Nucleotide sequence analysis, however, could not yet substantiate this. Computer-assisted comparison of the DNA sequences revealed the presence of rat long terminal repeat-like repetitive elements in pBUS19. The differential expression of repetitive elements in progressionally related tumors is interesting, yet similar findings have not been reported in human malignancies. Nucleotide sequence analysis of pBUS1 indicated that this clone is identical or related to high mobility group protein I(Y), a non-histone nuclear protein. From recent studies it appeared that this protein might be implicated in replication and/or transcription processes and is induced in fast proliferating/undifferentiated cells. The overexpression of high mobility group protein I(Y) correlates rather with metastatic ability than with growth rate; hence it may serve as a valuable marker to identify progressionally advanced prostate cancer cells.

2/3,AB/40
DIALOG(R)File 155:MEDLINE(R)

06787161 91026785 PMID: 2223388
The pS2 gene, mRNA, and *protein*: a potential *marker* for human breast *cancer*.
Rio M C; Chambon P
Laboratoire de Genetique Moleculaire des Eucaryotes du CNRS, Institut de Chimie Biologique, Faculte de Medecine, Strasbourg, France.
Cancer cells (Cold Spring Harbor, N.Y. - 1989) (UNITED STATES) Aug-Sep 1990, 2 (8-9) p269-74, ISSN 1042-2196 Journal Code: 9000382
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Approximately 50% of human breast tumors secrete a small cysteine-rich protein called pS2. In the human breast cancer cell line MCF-7, expression of the pS2 protein is strongly induced by estrogen, and cloning and sequence analysis of the pS2 gene has revealed an "estrogen responsive element" in the gene's 5'-flanking region. The results of immunohistochemical assays and radioimmunoassays on breast cancer biopsies indicate that the pS2 protein is a marker for hormone-dependent breast tumors and that its expression is associated with longer overall, and disease-free, survival. The pS2 protein is also expressed in normal stomach mucosa and in regenerative tissues in ulcerative diseases of the gastrointestinal tract. Its physiological function is unknown.

2/3,AB/41
DIALOG(R)File 155:MEDLINE(R)

06775208 91014671 PMID: 2170808

Regulation of the human C-reactive *protein* gene, a major *marker* of inflammation and *cancer*.
Toniatti C; Arcone R; Majello B; Ganter U; Arpaia G; Ciliberto G Dipartimento di Biochimica e Biotecnologie Mediche, Universita di Napoli, Italy.
Molecular biology & medicine (ENGLAND) Jun 1990, 7 (3) p199-212, ISSN 0735-1313 Journal Code: 8403879
Document type: Journal Article; Review; Review, Academic Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Human C-reactive protein (CRP) is the major acute phase reactant during inflammation. Regulation of CRP gene expression has been studied in two experimental systems: transgenic mice and human hepatoma cells. In the first system the human CRP gene flanked by approximately 10(4) bases of 5' and 3' sequences is expressed in a liver-specific and inducible manner. The chromatin configuration of the CRP transgene is characterized by the presence of constitutive and inducible liver-specific DNase I-hypersensitive sites. Inducible sites map precisely at the level of the CRP promoter region. In hepatoma cells we analysed the expression of the bacterial chloramphenicol acetyltransferase (CAT) gene driven by various segments of the CRP promoter. This latter approach has led to the identification of promoter elements responsive to interleukin-6 and of hepatocyte-specific nuclear proteins that interact with them.

2/3,AB/42
DIALOG(R)File 155:MEDLINE(R)
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06668607 90294381 PMID: 2359180
A new 180 kDa. urine *protein* *marker* associated with bladder *cancer*.
Zhau H Y; Babaian R J; Hong S J
Department of Urology, University of Texas M. D. Anderson Cancer Center, Houston 77030.
Journal of urology (UNITED STATES) Jul 1990, 144 (1) p47-52, ISSN 0022-5347 Journal Code: 0376374
Contract/Grant No.: RR551-26; RR; NCRR
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
We surveyed the tumor-related proteins present in the urine specimens of 118 bladder cancer patients to seek a possible marker enabling future diagnosis and prognosis of this disease. We identified a protein of 180 kDa. by sodium dodecyl sulfate polyacrylamide gel electrophoresis in urine samples subjected to prior adsorption by protein-A conjugated to a sepharose bead. This protein appears to be a glycoprotein because it binds to concanavalin A-conjugated sepharose and can be eluted by alpha-methyl D-mannoside. It does not react immunochemically with antibodies prepared against either carcinoembryonic antigen or epidermal growth factor receptor, both of which have an apparent molecular weight close to 180 kDa. We found this protein in the urine of 74.3% of the patients with transitional cell carcinoma. It was not present in age-matched controls, patients with benign prostatic hyperplasia or patients with 10 other cancers. There was 1 false positive result in a patient with prostate cancer. It does not appear to be associated with urinary tract infection, blood contamination, premedication or anesthesia.

2/3,AB/43
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

06651241 90276929 PMID: 1693585
Follicle regulatory *protein*: a novel *marker* for granulosa cell *cancer* patients.
Rodgers K E; Marks J F; Ellefson D D; Yanagihara D L; Tonetta S A; Vasilev S A; Morrow C P; Montz F J; diZerega G S
Livingston Reproductive Biology Laboratory, University of Southern California School of Medicine, Los Angeles 90033.
Gynecologic oncology (UNITED STATES) Jun 1990, 37 (3) p381-7, ISSN 0090-8258 Journal Code: 0365304
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Follicle regulatory protein (FRP) is secreted by the granulosa cell of the ovary and plays a role in modulating follicle development. A dual epitope immunoassay using two murine monoclonal antibodies, isotype IgG1 (raised against porcine FRP), in tandem was developed to measure FRP in serum. The levels of FRP in the serum of women with granulosa cell tumors, normal, menstruating women, and postmenopausal women were determined. The levels of FRP were elevated in the serum of 79% of the women with granulosa cell tumors compared to the normal controls. FRP levels in serial samples from women with granulosa cell tumors generally correlated with the clinical course of the disease. Thus, FRP may provide a useful marker for granulosa cell tumors.

2/3,AB/44
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

06650678 90276366 PMID: 2351114
Regulation of progesterone-binding breast cyst *protein* GCDFP-24 secretion by estrogens and androgens in human breast *cancer* cells: a new *marker*

of steroid action in breast *cancer*. Simard J; Dauvois S; Haagensen D E; Levesque C; Merand Y; Labrie F Medical Research Council Group in Molecular Endocrinology, CHUL Research Center, Quebec, Canada.
Endocrinology (UNITED STATES) Jun 1990, 126 (6) p3223-31, ISSN 0013-7227 Journal Code: 0375040
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
We have previously demonstrated that androgens are potent inhibitors of breast cancer cell proliferation under both basal and estrogen-induced incubation conditions, while they suppress expression of the estrogen and progesterone receptors. To better understand the mechanisms responsible for the antagonism between androgens and estrogens in breast cancer and to obtain a new tumor marker for the actions of these two steroids, we have investigated the effects of androgens and estrogens on expression of the major protein found in human breast gross cystic disease fluid, namely GCDFP-24. This study was performed in ZR-75-1 and MCF-7 human breast cancer cells. After a 9-day incubation period, physiological concentrations of 17 beta-estradiol stimulated proliferation of ZR-75-1 and MCF-7 cells by 2- to 3.5-fold while simultaneously exerting a marked 70-90% inhibition of GCDFP-24 secretion. The estrogenic effects on GCDFP-24 secretion and cell proliferation were both competitively blocked by simultaneous incubation with the new steroidal pure antiestrogen EM-139. On the other hand, a maximal concentration (10 nM) of the nonaromatizable androgen dihydrotestosterone decreased by 50% the proliferation of ZR-75-1 cells; the half-maximal inhibitory effect was exerted at 0.01 nM. The androgen exerted a 3- to 4-fold stimulatory effect on GCDFP-24 secretion at an EC50 value of 0.01 nM. The effect of dihydrotestosterone on these parameters was competitively blocked by simultaneous incubation with the pure antiandrogen OH-flutamide. The present data show that the effects of estrogens and androgens in ZR-75-1 cells on GCDFP-24 secretion and cell growth are opposite. Similarly, in MCF-7 cells, estrogens stimulate cell growth, while GCDFP-24 secretion is inhibited. The present data also suggest that GCDFP-24 could well be a good biochemical marker for monitoring the response to androgenic and antiestrogenic compounds in the therapy of advanced breast cancer.

2/3,AB/45
DIALOG(R)File 155:MEDLINE(R)

06376711 90001096 PMID: 2571356
An evaluation of immunoreactivity for c-erbB-2 *protein* as a *marker* of poor short-term prognosis in breast *cancer*. Walker R A; Gullick W J; Varley J M
Department of Pathology, Leicester Royal Infirmary, UK.
British journal of cancer (ENGLAND) Sep 1989, 60 (3) p426-9, ISSN 0007-0920 Journal Code: 0370635
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Eighty-five breast carcinomas from the same number of patients have been assessed immunohistochemically using the antiserum 21N for the presence of the c-erbB-2 protein. Twenty-two of the patients had evidence of advanced disease (tumour fixation or distant metastases) at presentation. Follow-up was for a median of 24 months. c-erbB-2 protein was detected in the majority of cells in 14 (16.5%) carcinomas, and to a lesser extent in a further six (7%) tumours. There was no relationship between staining and stage, node status or size but more poorly differentiated carcinomas had evidence of staining (36%) than well (17%) or moderately (14%) differentiated carcinomas (P = 0.02). There was a significant association between staining and mortality (P = 0.009) and recurrence (P = 0.0002). The relative risk of death for staining compared to no staining (after adjusting for node status, stage and grade) was 2.97 (95% confidence interval 1.29, 6.84) and the relative risk of recurrence for staining compared to no staining after similar adjustment was 3.85 (95% confidence interval 1.86-7.97). In this particular group of patients immunoreactivity for c-erbB-2 protein is an independent indicator of poor short-term prognosis.

2/3,AB/46
DIALOG(R)File 155:MEDLINE(R)

06278041 89294098 PMID: 2472494
Acute phase *protein* (alpha 1 AT) as a tumor *marker* in patients with ovarian *cancer* (OC)]
Kawai M; Iida N; Inagaki S; Yamashita H; Imaizumi H; Kakihara M; Arii Y Dept. of Obstet. & Gyne., Toyohashi City Hospital.
Gan no rinsho. Japan journal of cancer clinics (JAPAN) Jun 1989, 35 (7) p799-803, ISSN 0021-4949 Journal Code: 1257753
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed
Serum alpha 1 AT was measured in 30 healthy women, 30 pregnant women, in 97 patients with various benign gynecologic diseases, and 38 patients with OC. The positive ratio (cut off level: 317 mg/dl) in OC patients was 78.9% (30/38), 11.3% (11/97) in patients with a benign gynecologic disease, 90% (27/30) in pregnant women,

and 0% (0/30) in healthy women. Histologically 92.3% of the patients (12/13) with a serous cystadenocarcinoma, 50% (4/8) with an endometrioid carcinoma, and 77.8% (7/9) with a mucinous cystadenocarcinoma were positive, but only 5.9% of the patients with a chocolate cyst were positive. Thus it was found that alpha 1 AT is a useful tumor marker in diagnosing OC.

2/3,AB/47
DIALOG(R)File 155:MEDLINE(R)

06237644 89253438 PMID: 2542151
Gross cystic disease fluid *protein*-15 as a *marker* for breast *cancer* : immunohistochemical analysis of 690 human neoplasms and comparison with alpha-lactalbumin.
Wick M R; Lillemoe T J; Copland G T; Swanson P E; Manivel J C; Kiang D T Division of Surgical Pathology, University of Minnesota School of Medicine, Minneapolis.
Human pathology (UNITED STATES) Mar 1989, 20 (3) p281-7, ISSN 0046-8177 Journal Code: 9421547
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The identification of metastatic carcinoma of the breast may be difficult in the absence of a previous history of breast cancer. Various immunophenotypic markers have been introduced to aid in this process. A monoclonal antibody directed at a 15-kilodalton (kd) gross cystic disease fluid protein (GCDFP-15) was applied immunohistochemically to paraffin sections of 105 breast cancers and 585 nonmammary malignancies in order to assess its value in this context. In addition, GCDFP-15 was compared with another putative mammary epithelial marker, alpha-lactalbumin (ALA), with respect to sensitivity and specificity for a diagnosis of breast carcinoma. Overall, the rates of specificity and sensitivity and the predictive value of a positive result for GCDFP-15 were 95%, 74%, and 74%, respectively. Corresponding statistical parameters for ALA were 50%, 50%, and 23%. A consistent congruency between the reactivity patterns of primary and metastatic breast cancers was noted for GCDFP-15 but not for ALA. Besides mammary carcinomas, the major tumor types that expressed GCDFP-15 were carcinomas of the salivary glands, sweat glands, and prostate. Since the latter three types of lesions are unlikely to be diagnosed as metastatic breast cancer, statistical indices were recalculated after exclusion of these three tumor types. Following this exclusion, the adjusted rate of specificity of GCDFP-15 and the predictive value of a positive result for a diagnosis of metastatic carcinoma of the breast were each 99%. In contrast, predictive parameters for ALA were not altered. These results show that GCDFP-15 is a specific marker for breast cancer and is superior to ALA in this respect.

2/3,AB/48
DIALOG(R)File 155:MEDLINE(R)

05726835 88080230 PMID: 2826000
Monoclonal antibody to HSV2 *protein* as an immunodiagnostic *marker* in cervical *cancer*.
Costa S; D'Errico A; Grigioni W F; Orlandi C; Smith C C; Mancini A M; Aurelian L
Departments of Obstetrics and Gynecology, University of Bologna Medical School, Italy.
Cancer detection and prevention. Supplement - official publication of the International Society for Preventive Oncology, Inc (UNITED STATES) 1987, 1 p189-205, ISSN 1043-6995 Journal Code: 8808253
Contract/Grant No.: CA-39691; CA; NCI
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The present study was designed to evaluate the possible use of monoclonal antibodies (mAbs) as diagnostic adjuncts to exfoliative cytology and tissue sections in intraepithelial (CIN) and invasive cervical cancer. Specimens were collected from 42 patients with various degrees of CIN, 15 patients with invasive cancer and two patients with condylomatous changes only. mAb H17, that recognizes a herpes simplex virus protein (ICP) representing a component of the viral ribonucleotide reductase, stained atypical exfoliated cells from 55% of patients with mild dysplasia and 100% of those with more severe lesions. The mean percentage of positive atypical cells increased as a function of the grading of CIN (32.6 +/- 6.3%, 63.5 +/- 2.7%, 67.9 +/- 8.1%, 81.4 +/- 10.1%, and 85.6 +/- 2.0% for mild, moderate, and marked dysplasia, CIS, and invasive cancer, respectively). Only a very small proportion of atypical cells from only two patients stained with a mAb to another herpes simplex virus protein (gA/B). Normal squamous, metaplastic, inflammatory, or koilocytotic cells did not stain with the mAbs. Of the 15 cases examined by cryostatic fresh sections with immunohistochemical techniques, only one case of invasive cancer did not stain with mAb anti-ICP, and all controls were negative. The high specificity and sensitivity of MAbH17 suggests that it may be a useful diagnostic/prognostic marker in CIN.

2/3,AB/49
DIALOG(R)File 155:MEDLINE(R)

05625990 87305432 PMID: 3476335
Immunosuppressive acidic *protein*" (IAP)--an

improvement for tumor *marker* diagnosis in epithelial ovarian *cancer*?] Immunosuppressive Acidic *Protein*" (IAP)--Eine Bereicherung fur die Tumormarkerdiagnostik beim epithelialen Ovarialkarzinom?
Sevelda P; Haider F; Spona J
Geburtshilfe und Frauenheilkunde (GERMANY, WEST) Jul 1987, 47 (7) p452-5, ISSN 0016-5751 Journal Code: 0370732
Document type: Journal Article ; English Abstract
Languages: GERMAN
Main Citation Owner: NLM
Record type: Completed
Aim of this prospective study was to examine the value of the "Immunosuppressive Acidic Protein" (IAP) as a tumour marker for epithelial ovarian carcinomas and to compare the results with these of the established tumour marker CA-125. In 75 patients with malignant ovarian tumours and in 36 patients with benign ovarian tumours and in 68 healthy women the serum IAP and CA-125 values were determined. In dependence of the threshold for the IAP (500 or 800 microgram/ml) a pronounced lower specificity (70.2% or 97.1%) or sensitivity (88% or 40%) could be achieved in comparison with the CA-125 (95.2% specificity and 81.3% sensitivity). In only 4% of all ovarian carcinomas the CA-125 was false negative and the IAP right positive. Whereas the serum CA-125 level correlated in 86.9% of the patients with the clinical course of disease, the serum IAP level correlated only in 43.3% of the patients with their clinical course of disease. We therefore concluded, that the IAP is less suitable as a tumour marker in ovarian carcinomas than the CA-125 and even the combination of both markers is only beneficial for a very small number of patients.

2/3,AB/50
DIALOG(R)File 155:MEDLINE(R)

05508483 87187407 PMID: 3568027
Cobalamin-binding *protein* in gastric juice as a new tumor *marker* in gastric *cancer*.
Inada M; Miyake T; Kudo H; Wakatsuki Y; Murakami M; Seki M; Mizuno M; Tsukada H; Okae S
Cancer detection and prevention (UNITED STATES) 1987, 10 (3-4) p285-91, ISSN 0361-090X Journal Code: 7704778
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Cobalamin-binding protein (binder) in gastric juice was studied as a biochemical marker of gastric cancer. Fasting gastric juice of cancer patients and controls with benign disease was used for separation of cobalamin binders by gel filtration and DEAE-cellulose column chromatography. Physicochemical properties of the binder in gastric cancer patients were shown to have a larger molecular size and more acidic isoelectric point than the control binder. The binder was found in the gastric juice of all patients with early gastric cancer. Detection of the binder may be clinically valuable as a possible marker in the diagnosis of gastric cancer.

2/3,AB/51
DIALOG(R)File 155:MEDLINE(R)

05197292 86198227 PMID: 3701144
Significance of immunosuppressive acidic *protein* in the diagnosis and follow-up of patients with ovarian *cancer*, in particular as a *marker* for chemotherapeutic effects]
Shimizu Y; Akagaki E; Hirota K; Kono M; Miura S; Okudaira Y; Kurachi K Nippon Sanka Fujinka Gakkai zasshi (JAPAN) Apr 1986, 38 (4) p554-60, ISSN 0300-9165 Journal Code: 7505749
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed
Serum immunosuppressive acidic protein (IAP) was determined in patients with ovarian cancer and was examined as a marker for ovarian cancer when, chemotherapy in particular, was applied. Samples were sera obtained from 68 ovarian cancers, 74 benign ovarian tumors, 54 cervical cancers, 57 uterine myomas and 88 healthy controls. Elevated levels of IAP were found in 89.5% of patients with ovarian cancer and this high positive ratio was not affected by tumor histologic features. The measurement of the serum IAP level is useful for the initial diagnosis of ovarian cancer because of low false positive rates (8.1%) in benign ovarian tumors and high positive rates even in the early stage of ovarian cancer. Serial determinations of serum IAP levels were well correlated with the response to the treatment (chemotherapy in particular) and the prognosis of cancer patients, even in the case of patients with leucocytopenia induced by the intensive chemotherapy. In case of recurrent patients (whose lesions were observed in the intraperitoneal space), IAP values tended to increase earlier than other conventional tumor-derived markers. Therefore, IAP may also be a useful follow-up marker for patients with ovarian cancer (particularly, for the early detection of recurrence).

2/3,AB/52
DIALOG(R)File 155:MEDLINE(R)

04073469 83202736 PMID: 6133497
Adenosine deaminase complexing *protein* (ADCP): a

transformation sensitive *protein* with potentials of a *cancer* *marker*. Herbschleb-Voogt E; Ten Kate J; Meera Khan P
Anticancer research (GREECE) Mar-Apr 1983, 3 (2) p95-100, ISSN 0250-7005 Journal Code: 8102988
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Several observations by independent investigators in the past have indicated that adenosine deaminase complexing protein (ADCP), present in considerable quantities in certain human tissues, was absent or decreased in the cancers originated from them. During the present study, electrophoretic analysis of adenosine deaminase (ADA) isozymes and radioimmunoassay for ADCP in the primary fibroblasts and the transformed as well as certain tumor derived cell lines have demonstrated that ADCP present in large quantities in the primary cells was absent or nearly absent in the transformed or tumor-derived cell lines. Though the mechanisms involved are not yet clear, the above observations indicate that ADCP has the potentials of a useful marker in the studies on transformed cells and cancer tissues.

2/3,AB/53
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

03581801 81274263 PMID: 7268158
C1 esterase inhibitor *protein* associated with human *cancer*: a tumour *marker*.
Abad Esteve A; Germa Lluch J R
Revista espanola de oncologia (SPAIN) 1980, 27 (4) p563-9, ISSN 0482-640X Journal Code: 20230240R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The concentration of a cancer-associated serum C1 esterase inhibitor protein was determined in 194 cases of human cancer, grouped according to their clinical activity. As control groups healthy blood donors and patients having non neoplastic chronic lung and liver diseases were included in the study. The results showed highly significant differences when the values obtained for "active" malignant tumors were compared with the two control groups and the quiescent tumours. The authors conclude that C1 esterase inhibitor protein measurement may be useful as a clinical tumour marker.

2/3,AB/54
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

02640914 78067875 PMID: 73565
Immunological characterization of the human breast cyst progesterone binding *protein* (CPP)--A *marker* for breast *cancer*? Dufour D; Page M; Gauvin L; Gagnon P M
Journal of the Maine Medical Association (UNITED STATES) Jan 1978, 69 (1) p22-5, ISSN 0025-0694 Journal Code: 7505619
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
? ds

Set Items Description
S1 1246 (CANCER AND MARKER)/TI
S2 54 S1 AND PROTEIN/TI
? s s1 and (pancrease or pancreatic)/ti
1246 S1
42 PANCREASE/TI
39300 PANCREATIC/TI
S3 34 S1 AND (PANCREASE OR PANCREATIC)/TI
? s si and (pancreas or pancreatic)/ti
15894 SI
20856 PANCREAS/TI
39300 PANCREATIC/TI
S4 67 SI AND (PANCREAS OR PANCREATIC)/TI
? t s4/3,ab/all

4/3,AB/1
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14877645 22372681 PMID: 12486498
Secretory defects induced by immunosuppressive agents on human *pancreatic* beta-cells.
Polastri L; Galbiati F; Bertuzzi F; Fiorina P; Nano R; Gregori S; Aldrighetti L; Pozza G; Secchi A; Adorini L; Davalli A M
Department of Medicine, San Raffaele Scientific Institute, Via Olgettina 60, I-20132 Milan, Italy.
Acta diabetologica (Germany) Dec 2002, 39 (4) p229-33, ISSN 0940-5429 Journal Code: 9200299
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Despite the considerable interest for islet and pancreas transplantation, remarkably little is known about the direct effects of immunosuppressive drugs on human beta-cell function. We measured different insulin secretory parameters and insulin gene expression of human islets cultured for 5 days in the presence of mycophenolate mofetil (MMF), cyclosporin A (CsA), tacrolimus (FK506) or a mixture of 3 cytokines. Basal insulin release after exposure to cytokines and FK506 was significantly higher than in control islets.

Responsiveness to an acute glucose stimulus did not differ significantly between control and treated islets. However, absolute incremental insulin responses (delta-AUCs) of islets exposed to cytokines or FK506 were significantly higher compared to islets exposed to CsA or MMF, mainly because of the higher basal release. Indeed, maximal over basal release (stimulation index, *SI*) tended to be lower in islets exposed to FK506 than in control islets. Insulin gene expression was significantly reduced only in islets exposed to CsA. FK506 was, among those tested, the immunosuppressive drug that most profoundly altered the normal insulin secretory pattern of human beta-cells, whereas CsA was the only inhibiting insulin gene expression. Although the abnormalities induced by the immunosoppressive drugs utilized in this study were modest, these in vitro data are consistent with the reported in vivo diabetogenicity of CsA and FK506 and point to MMF as the ideal immunosuppressive agent from a pancreatic beta-cell point of view.

4/3,AB/2
DIALOG(R)File 155:MEDLINE(R)

14133861 22193179 PMID: 12205917
An investigation of immunoprotecting mechanism of macroencapsulated *pancreatic* islet xenograft]
Yang H; Zhang P; Zhang C; et al
Department of Endocrinology, First Affiliated Hospital, WCUMS, Chengdu 610041.
Hua xi yi ke da xue xue bao = Journal of West China University of Medical Sciences = Huaxi yike daxue xuebao / bian ji zhe, Hua xi yi ke da xue xue bao bian wei hui (China) Mar 1999, 30 (1) p34-6, ISSN 0257-7712 Journal Code: 8609552
Document type: Journal Article ; English Abstract
Languages: CHINESE
Main Citation Owner: NLM
Record type: Completed
Macroencapsulated islet xenografts in agarose are able to prevent rejection. This study was conducted to shed light on the immunoprotecting mechanism of macroencapsulated islet xenografts in agarose. There were four groups (n = 5 in each group): (1) macroencapsulated islet xenografts in agarose; (2) nonencapsulated islet xenografts; (3) agarose macroeencapsule without islet; (4) syngenic pancreatic islets. Mixed lymphocyte islet culture (MLIC) was used in the experiment. The results showed that stimulating index (*SI*) of MLIC and IL-2 level in the macroencapsulated islet xenografts in agarose group were similar to those of syngenic pancreatic islets group. The *SI* and IL-2 levels of nonencapsulated islet xenograft group were significant higher than those in macroencapsulated islet xenografts in agarose group and syngenic pancreatic islets group. These indicate that macroencapsulation is capable of reducing the immunogenicity of islet xenograft, and it is presumable that macroencapsulated islet xenografts in agarose be not recognized by the recipient's immune system because of being separated by the selectively permeable membrane made with agarose.

4/3,AB/3
DIALOG(R)File 155:MEDLINE(R)

13938879 22182223 PMID: 12194520
In vitro and in vivo evaluation of alginate/sol-gel synthesized aminopropyl-silicate/alginate membrane for bioartificial *pancreas*.
Sakai Shinji; Ono Tsutomu; Ijima Hiroyuki; Kawakami Koei; et al Department of Materials Process Engineering, Graduate School of Engineering, Kyushu University, 6-10-1 Hakozaki, Higashi-ku, Fukuoka 812-8581, Japan. sakai@chem-eng.kyushu-u.ac.jp
Biomaterials (England) Nov 2002, 23 (21) p4177-83, ISSN 0142-9612 Journal Code: 8100316
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: In Process
Alginate/aminopropyl-silicate/alginate (Alg/AS/Alg) membrane was prepared on Ca-alginate gel beads by a sol-gel process. The membrane has identical to *Si*-O-*Si* identical to bonds as well as electrostatic bonds between amino groups of AS and carboxyl groups of alginate. Permeability and stability were investigated for the membrane. Furthermore, rat islets encapsulated in the membrane (499 +/- 32 microns in diameter, 1000 islets/recipient) were transplanted to the peritoneal cavities of the mice with streptozotocin-induced diabetes. Our data show that the membrane had the molecular weight cut-off point of between 70 and 150 kDa, and hardly inhibited the permeation of glucose and insulin. The Alg/AS/Alg microcapsule was more stable than the well-known Alg/poly-L-lysine (PLL)/Alg microcapsule. After 30 days of soaking in stimulated body fluid, the percentages of intact microcapsule were 98.4 +/- 0.5 (mean +/- SEM)% and 88.0 +/- 1.5% ($p < 0.001$) for the Alg/AS/Alg and Alg/PLL/Alg microcapsules, respectively. The maximum maintenance period of normoglycemia was 105 days without administration of immunosuppressive drugs.

4/3,AB/4
DIALOG(R)File 155:MEDLINE(R)

11891840 99334216 PMID: 10405744
Pancreatic carcinoma versus chronic pancreatitis:

dynamic MR imaging.
Johnson P T; Outwater E K
Department of Radiology, Thomas Jefferson University Hospital, Philadelphia, PA 19107, USA. johnson5@jeflin.tju.edu
Radiology (UNITED STATES) Jul 1999, 212 (1) p213-8, ISSN 0033-8419 Journal Code: 0401260
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
PURPOSE: To determine if dynamic gadolinium-enhanced magnetic resonance (MR) imaging can distinguish chronic pancreatitis from pancreatic carcinoma. MATERIALS AND METHODS: A retrospective review of MR and pathology examination findings was performed for 24 patients with pancreatic ductal adenocarcinoma and seven with chronic pancreatitis who underwent dynamic gadolinium-enhanced breath-hold spoiled gradient-echo imaging. Arterial, portal, and delayed phase images were obtained after injection of gadopentatate dimeglumine. The MR images of 14 patients without clinical evidence of pancreatic disease were also reviewed as controls. Signal intensity (*SI*) was measured on the precontrast (pre) and gadolinium-enhanced (post) images of the area of the pancreas sampled at biopsy and of the nontumorous pancreas. Percentage enhancement was defined as SIpre/SIpost x 100. RESULTS: Normal pancreas showed rapid enhancement that peaked in the arterial or portal phase. For both diseases, T1-weighted images showed hypointense masses with progressive enhancement (differences were significant [P < .05] on only delayed fat-saturated images). Differences in enhancement between either disease state and normal pancreas were significant for at least one phase. Nontumorous pancreas in patients with carcinoma showed gradual enhancement that was significantly different from that of normal pancreas. CONCLUSION: Chronic pancreatitis and pancreatic carcinoma show abnormal pancreatic enhancement, but the two were not distinguished on the basis of degree and time of enhancement.

4/3,AB/5
DIALOG(R)File 155:MEDLINE(R)

11737601 99174643 PMID: 10077025
Sequence optimization in mangafodipir trisodium-enhanced liver and *pancreas* MRI.
Wang C; Johansson L; Western A; Fagertun H; Ahlstrom H
Department of Diagnostic Radiology, Uppsala University Hospital, Sweden. Chen.Wang@radiol.uu.se
Journal of magnetic resonance imaging - JMRI (UNITED STATES) Feb 1999, 9 (2) p280-4, ISSN 1053-1807 Journal Code: 9105850
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To find an optimal magnetic resonance (MR) sequence for mangafodipir trisodium-enhanced liver and pancreas imaging, six healthy volunteers were studied using a 1.5 T MR system with different T1-weighted abdominal imaging sequences. These were turbo field (gradient)-echo (TFE), fast field (gradient)-echo (FFE), and spin-echo sequences before and after mangafodipir trisodium administration. Various parameter combinations were investigated within each sequence type, and then the best combination was found and compared with those of the other sequences. Signal intensity (*SI*) measurements were made in regions of interest in the liver, pancreas, and a reference marker with a known T1 value. Contrast index (CI, SItissue/SImarker) and contrast-to-noise ratio (CNR, [SItissue/SImarker]/SD background) were calculated, and percentage CI increase and CNR in the postcontrast images were used for the best sequence evaluation. Regarding CI, the TFE sequence with a TR/TE/flip angle of 15 msec/4.6 msec/20 degrees and inversion time of 300 msec had the largest pre- to postcontrast percentage increase. The FFE sequence with a TR/TE/flip angle of 140 msec/4.6 msec/90 degrees had the highest postcontrast CNR and is considered to be the optimal sequence for mangafodipir trisodium-enhanced MR imaging of the liver and pancreas.

4/3,AB/6
DIALOG(R)File 155:MEDLINE(R)

11650166 99084324 PMID: 9868979
No deterioration in insulin sensitivity, but impairment of both *pancreatic* beta-cell function and glucose sensitivity, in Japanese women with former gestational diabetes mellitus.
Sakamaki H; Yamasaki H; Matsumoto K; Izumino K; Kondo H; Sera Y; Ozaki M; Abe T; Kawasaki E; Takino H; Yamaguchi Y; Eguchi K
The First Department of Internal Medicine, Nagasaki University School of Medicine, Sakamoto, Japan.
Diabetic medicine - a journal of the British Diabetic Association (ENGLAND) Dec 1998, 15 (12) p1039-44, ISSN 0742-3071 Journal Code: 8500858
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To identify the primary pathogenic factors involved in the development of Type 2 diabetes mellitus (DM), we studied Japanese women with former gestational diabetes mellitus (GDM) who are at risk for the later development of Type 2 DM. We used the minimal

model analysis derived from frequently sampled intravenous glucose tolerance test (FSIGT). The subjects consisted of eight non-obese women with a history of GDM and eight non-obese normal women as control subjects. The 75 g oral glucose tolerance test (75 g OGTT) performed within 6 months of delivery confirmed that all the subjects with former GDM had a normal glucose tolerance. Insulin sensitivity (*SI*) derived from the minimal model analysis was not different between the two groups. Glucose effectiveness at zero insulin (GEZI), reflecting tissue glucose sensitivity, was significantly lower in former GDM patients than in control subjects (1.18+/-0.34 vs 2.26+/-0.29 x 10(-2) min(-1), p < 0.05). The early phase insulin secretion found in FSIGT was markedly reduced to 56% of that observed in control subjects (1250+/-87.4 vs 2223+/-304.3 pmol l(-1) min, p < 0.01). Our results indicate that in former GDM patients, who are japanese and non-obese, impairment of the acute insulin response to glucose and a decrease in tissue glucose sensitivity rather than insulin sensitivity are the primary pathogenic factors involved.

4/3,AB/7
DIALOG(R)File 155:MEDLINE(R)

11348602 98228865 PMID: 9567458
Pancreatic fistula after cephalic duodenopancreatectomy. Its incidence, significance and therapeutic characteristics]
Fistula pancreatica dupa duodenopancreatectomia cefalica. Incidenta, importanta, *si* particularitati terapeutice.
Bud V; Copotoiu C; Coros F; Budisca O; Serba N
Clinica Chirurgie I, Universitatea de Medicina si Farmacie, Tg.-Mures. Chirurgia (Bucharest, Romania - 1990) (ROMANIA) Jan-Feb 1998, 93 (1) p23-6, ISSN 1221-9118 Journal Code: 9213031
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
In this paper the authors present a study of pancreatic fistula after cephalic duodenopancreatectomy concerning the incidence, importance and the therapeutic features in a number of 37 patients operated between 1.Jan.1990-1.Jan. 1997 at the 1st Department of Surgery of Clinical County Hospital of Targu-Mures. A number of 8 patients (22%) had pancreatic fistula; a half of them were treated by surgical reintervention, and the second half by conservative procedures.

4/3,AB/8
DIALOG(R)File 155:MEDLINE(R)

11098322 97392061 PMID: 9248804
Dynamic fast-gradient echo MR imaging of *pancreatic* tumours. Tervahartiala P; Kivisaari L; Lamminen A; Maschek A; Wohling H; Standertskjold-Nordenstam C G
Department of Radiology, Helsinki University Hospital, Finland. European journal of radiology (IRELAND) Jul 1997, 25 (1) p74-80, ISSN 0720-048X Journal Code: 8106411
Document type: Clinical Trial; Clinical Trial, Phase III; Journal Article Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The purpose of this study was to determine the diagnostic utility of dynamic magnetic resonance imaging (MRI) of the pancreas. Twenty-eight adult patients with known or suspected pancreatic tumours were examined. Pre- and post-gadolinium (GdDTPA-BMA) scans were obtained in combination with an oral negative contrast medium (ferristene) to mark the gastrointestinal tract. In 6 cases a more precise diagnosis could be made by dynamic MRI compared to unenhanced MRI. Surgery could confirm the MR diagnosis based on contrast enhancement in 83% compared to 78% for CT. The results of signal intensity (*SI*) measurements show that a combination of differences in baseline values before enhancement and the slope of enhancement within the first 20 s is a reliable criterion to distinguish between normal pancreas and hypovascular tumours. These tumours already show lower *SI* values before as well as lower slopes after early enhancement. Mainly two effects facilitate the final MRI diagnosis: (1) the delineation of the pancreas from the duodenum by the negative contrast medium, and (2) the enhancement pattern of pancreatic tumours by gadolinium-enhanced dynamic MRI compared to normal tissue within the early enhancement after contrast injection.

4/3,AB/9
DIALOG(R)File 155:MEDLINE(R)

11038322 97392061 PMID: 9248804
Dynamic fast-gradient echo MR imaging of *pancreatic* tumours. Tervahartiala P; Kivisaari L; Lamminen A; Maschek A; Wohling H; Standertskjold-Nordenstam C G
Department of Radiology, Helsinki University Hospital, Finland. European journal of radiology (IRELAND) Jul 1997, 25 (1) p74-80, ISSN 0720-048X Journal Code: 8106411
Document type: Clinical Trial; Clinical Trial, Phase III; Journal Article Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The purpose of this study was to determine the diagnostic utility of dynamic magnetic resonance imaging (MRI) of the pancreas. Twenty-eight adult patients with

known or suspected pancreatic tumours were examined. Pre- and post-gadolinium (GdDTPA-BMA) scans were obtained in combination with an oral negative contrast medium (ferristene) to mark the gastrointestinal tract. In 6 cases a more precise diagnosis could be made by dynamic MRI compared to unenhanced MRI. Surgery could confirm the MR diagnosis based on contrast enhancement in 83% compared to 78% for CT. The results of signal intensity (*SI*) measurements show that a combination of differences in baseline values before enhancement and the slope of enhancement within the first 20 s is a reliable criterion to distinguish between normal pancreas and hypovascular tumours. These tumours already show lower *SI* values before as well as lower slopes after early enhancement. Mainly two effects facilitate the final MRI diagnosis: (1) the delineation of the pancreas from the duodenum by the negative contrast medium, and (2) the enhancement pattern of pancreatic tumours by gadolinium-enhanced dynamic MRI compared to normal tissue within the early enhancement after contrast injection.

4/3,AB/10
DIALOG(R)File 155:MEDLINE(R)

10968393 97321091 PMID: 9177822
A study of cell-mediated immune response to *pancreatic* antigens in patients with fibrocalculous *pancreatic* diabetes.
Tandhanand-Banchuin N; Kespichayawatana W; Vannasaeng S; Sarasombath S Department of Immunology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand.
Asian Pacific journal of allergy and immunology / launched by the Allergy and Immunology Society of Thailand (THAILAND) Dec 1996, 14 (2) p91-7, ISSN 0125-877X Journal Code: 8402034
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
In order to investigate whether there was any association between autoimmunity to pancreatic antigens with FCPD as well as IDDM, cell-mediated immune response to pancreatic antigens was studied by lymphoproliferation assay in 7 FCPD, 17 IDDM, 33 NIDDM patients and 102 normal controls. Optimal pancreatic antigen concentrations used were 100, 150 and 200 micrograms/ml. Positive results were considered for each concentration of antigens tested, at stimulation index (*SI*) > (mean +/- 2 SD) *SI* obtained from normal age-matched controls with the use of the corresponding concentration of antigen. The one who gave positive result with any of these optimal antigen concentrations was considered to be the responder to pancreatic antigens. With this criterion, the responders were found to be 3/7 (42.9%) FCPD, 6/17 (35.3%) IDDM and 6/33 (18.2%) NIDDM patients; while there were 11 of all 102 (10.8%) normal controls.

4/3,AB/11
DIALOG(R)File 155:MEDLINE(R)

10862041 97213504 PMID: 9091074
Pancreatic and extrapancreatic fluid collections following acute and chronic pancreatitis]
Colectii lichidiene pancreatice *si* extrapancreatice succedand pancreatitei acute *si* cronice.
Diaconescu M R; Vexler L; Costea I; Simon I; Iacomi S
Clinica a IV-a Chirurgie, U.M.F. Gr. T. Popa, Iasi.
Chirurgia (Bucharest, Romania - 1990) (ROMANIA) Sep-Oct 1996, 45 (5) p239-43, ISSN 1221-9118 Journal Code: 9213031
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
Intra- or extrapancreatic liquid collections are common complications for acute and chronic pancreatitis, with variable morphologic features and possible evolution toward complications. A total of 31 liquid collections (pseudocysts, ascites and/ or enzymatic pleurisy) in 22 patients are presented. The study assems the etiology, the diagnostic methods and the treatment of the liquid collections. The preferred surgical treatment is either cysto-digestive anastomosis or distal pancreatic resections. Also some new therapeutic modalities are analyzed percutaneous or endoscopic drainage.

4/3,AB/12
DIALOG(R)File 155:MEDLINE(R)

10671095 97020178 PMID: 8866563
Effect of troglitazone on insulin sensitivity and *pancreatic* beta-cell function in women at high risk for NIDDM.
Berkowitz K; Peters R; Kjos S L; Goico J; Marroquin A; Dunn M E; Xiang A; Azen S; Buchanan T A
Department of Medicine, University of Southern California School of Medicine, Los Angeles, USA.
Diabetes (UNITED STATES) Nov 1996, 45 (11) p1572-9, ISSN 0012-1797 Journal Code: 0372763
Contract/Grant No.: M01 RR-43; RR; NCRR; R01-DK-46374; DK; NIDDK Document type: Clinical Trial; Journal Article; Randomized Controlled Trial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

We conducted a randomized placebo-controlled study to determine the effects of the thiazolidinedione compound troglitazone on whole-body insulin sensitivity (*SI*), pancreatic beta-cell function, and glucose tolerance in 42 Latino women with impaired glucose tolerance (IGT) and a history of gestational diabetes mellitus (GDM), characteristics that carry an 80% risk of developing NIDDM within 5 years. After baseline oral (OGTT) and intravenous (IVGTT) glucose tolerance testing, subjects were assigned to take placebo or 200 or 400 mg troglitazone daily for 12 weeks (14 subjects per treatment group). An OGTT and IVGTT were repeated during the 12th week of treatment. Five subjects failed to complete the trial for personal reasons, and medication compliance averaged 90% in the remaining subjects, none of whom experienced a serious adverse event. *SI*, calculated by minimal model analysis of IVGTT results, changed by only 4 +/- 14% during 12 weeks of placebo administration, but increased 40 +/- 22 and 88 +/- 22% above basal during treatment with 200 and 400 mg troglitazone, respectively (P = 0.01 among groups). Troglitazone administration was also associated with a dose-dependent reduction in the total insulin area during IVGTTs, which was highly significant (P < 0.001), and with a reduction during OGTTs, which approached statistical significance (P = 0.09). Glucose tolerance improved slightly in all groups, but the magnitude of change did not differ significantly among groups, whether it was assessed as the number of subjects who continued to manifest IGT at 12 weeks (P = 0.64 among groups), the change in total glucose area during OGTTs (P = 0.58), or the change in fractional glucose disappearance rates during IVGTTs (P = 0.28). Among the women who received troglitazone, the greatest improvement in *SI* occurred in the women who had the highest diastolic blood pressures and the best IVGTT insulin responses during baseline testing. Our findings indicate that troglitazone improved whole-body insulin sensitivity and lowered circulating insulin concentrations in women with prior GDM who are at very high risk for NIDDM. The lack of improvement in glucose tolerance despite improved insulin sensitivity may be a manifestation of the beta-cell defect that predisposes the women to NIDDM. The overall pattern of response to troglitazone in our high-risk patients indicates that the drug is an ideal agent with which to test whether the amelioration of insulin resistance can delay or prevent diabetes in women with limited beta-cell reserve.

10659989 97008677 PMID: 8855794

Normalization of insulin sensitivity and glucose homeostasis in type I diabetic *pancreas* transplant recipients: a 48-month cross-sectional study--a clinical research center study.

Cottrell D A

Division of Endocrinology, Diabetes, and Metabolism, Ohio State University, Columbus 43210, USA.

Journal of clinical endocrinology and metabolism (UNITED STATES) Oct 1996, 81 (10) p3513-9, ISSN 0021-972X Journal Code: 0375362 Contract/Grant No.: MO1-RR-00034; RR; NCRR

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Despite the establishment of heterotopic, whole cadaveric, pancreas-kidney transplantation as an effective form of therapy for type I diabetes with chronic renal insufficiency, uncertainty remains regarding the potentially deleterious effects of severe peripheral hyperinsulinemia and long-term immunosuppressive therapy on insulin sensitivity (*SI*) and, subsequently, on beta-cell function and maintenance of euglycemia over years. To examine the alterations in *SI* that may occur over time and their impact on glucose homeostasis, beta-cell function, *SI*, and glucose effectiveness (SG) were measured using the frequently sampled iv glucose tolerance test (FSIGTT) and minimal model method in 39 glucose-tolerant type I diabetic pancreas-kidney transplant recipients in a cross-sectional manner at 3, 6, 12, 24, 36, and 48 months post transplantation. Mean basal and poststimulation (oral glucose tolerance test and FSIGTT) serum glucose responses were similar among the groups from 3-48 months. Plasma insulin response during the FSIGTT was higher (P < 0.001, repeated measures ANOVA) at 6 months vs. 12-48 months. Incremental integrated areas under the curve for 1st phase, glucose-stimulated, tolbutamide-stimulated, and total insulin responses tended to be higher (P = NS) at 6 months. Glucose disappearance rate constant, kG, did not differ significantly from 3-48 months. Mean +/- SE SI in the pancreas-kidney recipients was 4.25 +/- 1.6 x 10(-4) min-1/microU.mL-1 at 3 months (group 1, n = 7) (vs. 7.9 +/- 0.9 x 10(-4) normal reference), decreased to 2.95 +/- 0.6 at 6 months (group 2, n = 11), improved to baseline values of 4.6 +/- 1.0 at 12 months (group 3, n = 10), and normalized at 24 months (group 4, n = 6) to 7.5 +/- 1.7 (P = 0.008). The normalisation in *SI* was sustained at 36 months (group 5, n = 3, 8.0 +/- 3.7, P = 0.03), and up to 48 months (group 6, n = 5, 6.1 +/- 1.6, P = 0.04) in the type I diabetic pancrease allograft recipients. Corresponding SG tended to increase but did not differ significantly from 3 (1.69 +/- 0.2 x 10(-2)/min), 6 (2.33 +/- 0.39), 12 (1.9 +/- 0.2), 24 (1.9 +/- 0.4), 36 (1.98 +/- 0.15), and 48 months (2.27 +/- 0.3). Hepatic insulin extraction did not differ among the groups. *SI*

correlated significantly with prednisone dose (r = -0.45, P = 0.002). In summary, after successful whole cadaveric, heterotopic, pancreas-kidney transplantation in type I diabetic recipients: 1) euglycemia remains relatively stable over 48 months; 2) *SI* is diminished early after transplantation (3-6 months), possibly caused by the effects of initially high doses of prednisone and hyperinsulinemia. However, this is compensated by a normal SG and by hyperinsulinemia to maintain euglycemia; 3) *SI* improves by 12 months and normalizes from 24-48 months, after transplantation, despite hyperinsulinemia and long-term immunosuppressive therapy. The time-dependent decrease in poststimulation insulin response after successful pancreas-kidney transplantation in type I diabetic recipients, therefore, is not caused by gradual beta-cell decline but rather is a response to normalization of *SI* . However, longitudinal studies pre-and post pancreas transplantation over an extended period of time will be necessary to confirm the present findings.

4/3,AB/14
DIALOG(R)File 155:MEDLINE(R)

10579914 96392631 PMID: 8799419
The differential diagnosis of *pancreatic* cysts by MR imaging. Nishihara K; Kawabata A; Ueno T; Miyahara M; Hamanaka Y; Suzuki T Department of Surgery II, Yamaguchi University School of Medicine.
Hepato-gastroenterology (GREECE) May-Jun 1996, 43 (9) p714-20, ISSN 0172-6390 Journal Code: 8007849
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
BACKGROUND/AIM: The usefulness of magnetic resonance imaging (MR imaging) in the differential diagnosis of cystic lesions of the pancreas was assessed. METHODS AND MATERIALS: Pseudocyst was present in 9 patients, retention cyst in 4, simple cyst in 2, serous cystadenoma in 1, mucinous cystadenoma in 6, mucinous cystadenocarcinoma in 6. The relative signal intensity (*SI*) of each cystic lesion on MR imaging was assessed in comparison with that of the liver. RESULTS: It was difficult to distinguish the cystic types from each other based on the *SI* on MR images. Insofar as mucinous cystic tumors, those containing gelatinous mucin showed higher *SI* on T1-weighted images than those containing mucinous but watery fluid. five of the 6 mucinous cystic tumors containing gelatinous mucin were histologically malignant, whereas all except one those containing watery fluid were benign. CONCLUSIONS: Our results suggest that the *SI* on T1-weighted images may be useful in distinguishing malignant from benign mucinous cystic tumors.

4/3,AB/15
DIALOG(R)File 155:MEDLINE(R)

10497958 96308497 PMID: 8722143
The surgical treatment of *pancreatic* cysts and pseudocysts] Tratamentul chirurgical al chisturilor *si* pseudochisturilor de *pancreas*.
Andronescu P; Miron A
Chirurgia (Bucharest, Romania - 1990) (ROMANIA) 1995, 44 (2) p1-8, ISSN 1221-9118 Journal Code: 9213031
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
Pancreatic cysts and pseudocysts are now being detected more often as a result of wide use of abdominal echography and CT scan. Surgical strategy advocates resection whenever possible for true cysts and internal drainage for pseudocysts. The present study retrospectively analyses 8 cases of true cysts and 23 cases of pseudocysts submitted to surgery in a twenty years period. Conservative treatment and ultrasonography-guided percutaneous drainage were not discussed. Four true cysts with positive benign structure were treated by internal drainage and only two adenocarcinomas were resected. In two more malignancies internal drainage was done as a palliative procedure followed by lethal outcome. Pseudocysts were secondary to acute pancreatitis in 7 cases, chronic pancreatitis in 6 cases, abdominal trauma in 4 cases and were idiopathic in 6 cases. Caudal pancreatectomy was performed whenever distal localisation was diagnosed. External drainage imposed in 5 emergency situations but internal drainage was elective in 13 cases. In conclusion according to our experience internal drainage should be preferred as the main surgical treatment in all mature pseudocysts and also when benign true cysts are certified. Posterior transgastric cystogastroanastomosis is the procedure of choice.

4/3,AB/16
DIALOG(R)File 155:MEDLINE(R)

10379114 96184295 PMID: 8606232
MRI of *pancreatic* metastases from renal cancer.
Kelekis N L; Semelka R C; Siegelman E S
Department of Radiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27599-7510, USA.
Journal of computer assisted tomography (UNITED STATES) Mar-Apr 1996, 20 (2) p249-53, ISSN 0363-8715 Journal Code: 7703942
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM

Record type: Completed
OBJECTIVE: Our goal was to describe the MR features of pancreatic metastases from renal cancer. MATERIALS AND METHODS: Five patients with pancreatic metastases from renal cancer were imaged with MR. Imaging was performed on a 1.5 T MR imager using excitation-spoiled fat-suppressed T1-weighted SE images (all patients), T1-weighted spoiled GE images (all patients), T2-weighted fast SE (one patient) and excitation-spoiled fat-suppressed T2-weighted fast SE (one patient) images, serial postgadolinium spoiled GE images (all patients), and postcontrast excitation-spoiled fat-suppressed T1-weighted SE images (two patients). RESULTS: Multiple pancreatic lesions (n = 6) were present in two patients, solitary tumors in two patients, and diffuse micronodular pancreatic enlargement in one patient. All lesions were hypointense compared to normal pancreas on T1-weighted fat-suppressed SE images. Lesions were high in *SI* on T2-weighted images in two of two patients. All lesions demonstrated enhancement on the immediate postgadolinium spoiled GE images with the smaller tumors (<1.5 cm, three individual and the micronodular tumors) showing diffuse enhancement and the larger tumors (>1.5 cm, five tumors) showing predominantly rim enhancement. CONCLUSION: Pancreatic metastases from renal cell carcinoma have distinctive MR features that include diffuse enhancement in small lesions and rim enhancement in large lesions on immediate postgadolinium images and high *SI* on T2-weighted images.

4/3,AB/17
DIALOG(R)File 155:MEDLINE(R)

09859649 21672592 PMID: 11814112
Nonviral transfection of intact *pancreatic* islets.
Lakey J R; Young A T; Pardue D; Calvin S; Albertson T E; Jacobson L; Cavanagh T J
Department of Surgery, Surgical-Medical Research Institute, University of Alberta, Edmonton, Canada. jonathan.lakey@ualberta.ca
Cell transplantation (United States) 2001, 10 (8) p697-708, ISSN 0963-6897 Journal Code: 9208854
Document type: Evaluation Studies; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Ex vivo gene transfer offers a potential means to introduce genes into cells, which may play an important role in preventing graft rejection and inducing graft tolerance. This study examined the efficiency and toxicity of several lipid-based transfection reagents (LipofectAMINE, DOTAP, and DOSPER) in intact pancreatic islets. Isolated islets were transfected with a pCMV-beta-galactosidase plasmid using several DNA/liposome ratios (1:12) of liposomes (3-72 microl) and DNA (3 and 6 microg). Transfection efficiency was quantified by microscopic evaluation of beta-galactosidase gene expression in whole intact islets. Functionality of the transfected islets was measured by insulin response to glucose solutions. All transfection reagents evaluated in this study transfected cells within the islets. As expected, untransfected controls and transfected islets with DNA alone did not express beta-gal. The highest transfection efficiency and functional viability were obtained following a 48-h incubation after exposure to the transfection mixtures as follows: 3 microl DNA and 18 microl DOTAP/ml (1:6 ratio), 6 microg DNA and 12 microl DOSPER/ml (1:2 ratio), or 6 microg DNA and 12 microl Lipofect-AMINE/ml (1:2 ratio). The highest rate of transfected cells per islet was obtained using DOTAP. In vitro functionality was not significantly different between DOTAP and nontreated controls. However, optimal transfection efficiency doses of LipofectAMINE and DOSPER significantly reduced the stimulated insulin response of the transfected islets ($p < 0.05$, ANOVA). The calculated stimulation index (*SI*) was 7.8+/-0.6 (mean +/- SEM) for DOTAP-transfected islets compared with 8.4+/-0.5 for nontransfected control islets ($p = ns$). The *SI* of DOSPER- and LipofectAMINE-transfected islets was significantly lower (6.1+/-0.5 and 3.4+/-0.5, respectively, $p < 0.05$). Lipid-based transfection using DOTAP at a DNA/lipid ratio of 1:6 provides an effective means of ex vivo gene delivery without compromising in vitro functionality of the transfected islets.

4/3,AB/18
DIALOG(R)File 155:MEDLINE(R)

09689937 21482175 PMID: 11599070
Functional assessment of *pancreatic* parenchyma after secretin administration using serial T2-weighted echo-planar magnetic resonance imaging.
Masui T; Katayama M; Kobayashi S; Ito T; Kabasawa H; Nozaki A; Sakahara H Department of Radiology, Seirei Hamamatsu General Hospital, 2-12-12 Sumiyoshi, Hamamatsu, 430-8558, Japan. masui@sis.seirei.or.jp
Journal of magnetic resonance imaging - JMRI (United States) Oct 2001, 14 (4) p450-6, ISSN 1053-1807 Journal Code: 9105850
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Signal intensity (*SI*) changes of pancreatic parenchyma were evaluated after intravenous administration of secretin using T2-weighted single-shot spin-echo echo-planar imaging (EPI) to assess this method as a magnetic resonance (MR) test of pancreatic

exocrine function. Nine volunteers were studied with serial single-shot EPI of the pancreas for 15 minutes after the injection of secretin or saline. The normal pattern of pancreatic *SI* change was demonstrated after intravenous injection of secretin, a single peak at 3-4 minutes in the head, body, and tail, followed by a gradual decrease in *SI*. Saline injection did not induce a significant *SI* change. There was no statistical difference in the peak contrast ratios (first mean, 1.21-1.25, vs. second mean, 1.18-1.22) and peak times (first mean, 3.2-3.7 minutes, vs. second mean, 3.1-3.6) in a repeat study. By evaluating the pattern of time-response curves obtained from serial T2-weighted EPI after secretin injection, pancreatic exocrine function may be directly assessed at the level of the head, body, and tail. Copyright 2001 Wiley-Liss, Inc.

4/3,AB/19
DIALOG(R)File 155:MEDLINE(R)

09644556 21432703 PMID: 11549073
Effect of basic fibroblast growth factor on insulin secretion from microencapsulated *pancreatic* islets: an in vitro study. Wang W; Gu Y; Miyamoto M; Hori H; Nagata N; Balamurugan A N; Touma M; Sakurai T; Inoue K
Department of Organ Reconstruction, Institute for Frontier Medical Sciences, Kyoto University, Japan.
Cell transplantation (United States) 2001, 10 (4-5) p465-71, ISSN 0963-6897 Journal Code: 9208854
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Microencapsulation of pancreatic islets represents a potentially effective method to prevent graft rejection in allotransplantation or xenotransplantation without the need of immunosuppression. Adequate insulin secretion and glucose responsiveness of microencapsulated pancreatic islets has been regarded as a prerequisite for successful transplantation. The microencapsulated pancreatic islets were respectively cultured in bFGF+ RPMI-1640 medium (bFGF+) or bFGF- RPMI-1640 medium (bFGF-) for 21 days. The functional activities of microencapsulated pancreatic islets were assessed by measuring basal insulin secretion and stimulated insulin release at different time points. The results revealed that microencapsulated pancreatic islets in the presence of bFGF demonstrated an increase in basal insulin secretion. Furthermore, microencapsulated pancreatic islets in the presence of bFGF demonstrated a marked stimulated insulin release and relative stability of stimulation indices (*SI*). The results in the perifusion study showed that microencapsulated pancreatic islets in the presence of bFGF maintained good glucose responsiveness over the course of culture period as well. These results indicate that bFGF has a beneficial effect on insulin secretion from microencapsulated pancreatic islets during in vitro culture. New strategies for preserving and improving function of microencapsulated pancreatic islets prior to transplantation may be developed by application of growth factors or other factors.

4/3,AB/20
DIALOG(R)File 155:MEDLINE(R)

09460446 21233222 PMID: 11335096
Pancreatic carcinoma and fast MR imaging: technical considerations for signal intensity difference measurements.
Piironen A; Kivisaari R; Laippala P; Poutanen V P; Kivisaari L Department of Radiology, Tampere City Hospital, Tampere, Finland. European journal of radiology (Ireland) May 2001, 38 (2) p137-45, ISSN 0720-048X Journal Code: 8106411
Document type: Clinical Trial; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The aim of the study was to find the fast magnetic resonance imaging (MRI) sequence with the best conspicuity of pancreatic lesions at 1.0 T and 1.5 T. A total of 51 patients were studied. At 1.0 T, 22 patients with verified malignant pancreatic lesions were studied using the T1-weighted breath-hold spoiled Gradient Echo 2D FLASH(75) or FLASH(80) sequences, both non-enhanced and enhanced with gadolinium. The relative signal intensity difference (SIDR) between lesion and pancreas was measured. At 1.5 T, 20 patients with primary malignant lesions of the pancreas, and nine patients with 13 benign cystic lesions were examined with the breath-hold T2-weighted TrueFISP, HASTE, T1-weighted 2D FLASH(80) and FLASH(50) fat saturation sequences, the latter also enhanced. The signal intensity (*SI*) values of the pancreas and lesions as well as the pancreatic standard deviation (S.D.) were assessed, and the contrast-to-noise ratio (C/N) was determined. Statistical significances were calculated using an analysis of variance. No statistically significant difference between the sequences used in the conspicuity of cancer was found, either at 1.0 T or at 1.5 T. At 1.5 T, the T2-weighted TrueFISP and HASTE sequences could differentiate benign, cystic lesions from malignant lesions.

4/3,AB/21
DIALOG(R)File 155:MEDLINE(R)

09091867 20389401 PMID: 10931589
MRI with mangafodipir trisodium in the detection and staging of *pancreatic* cancer.
Romijn M G; Stoker J; van Eijck C H; van Muiswinkel

J M; Torres C G; Lameris J S
Department of Radiology, University Hospital Rotterdam, The Netherlands. m.g.romijn@amc.uva.nl
Journal of magnetic resonance imaging - JMRI (UNITED STATES) Aug 2000, 12 (2) p261-8, ISSN 1053-1807 Journal Code: 9105850
Document type: Clinical Trial; Clinical Trial, Phase III; Journal Article Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The purpose of this study was to compare prospectively computed tomography (CT) and magnetic resonance (MR) imaging before and after mangafodipir trisodium infusion for the detection and staging of focal pancreatic lesions. From November 1996 to October 1997, 43 consecutive patients suspected to have a focal pancreatic lesion were included in a phase III study. Triphasic helical CT was performed, as well as MRI at 1.5 T, as follows: axial T1-weighted (T1w) turbo spin echo (TSE), spectral presaturation with inversion recovery (SPIR) T1w TSE, T1w turbo field echo (TFE), and SPIR T2w TSE before and after mangafodipir trisodium (0.01 mmol/ml, 0.5 ml/kg) infusion. Imaging results were correlated with surgery, laparoscopy, laparoscopic ultrasound, and biopsy. Objective measurements were performed by measuring signal intensities (SIs) of lesion and parenchyma and calculating contrast indexes (CIs) and contrast-to-noise-ratios (CNRs) to assess the delineation of the tumor. SIs were correlated with four phantom standards with a known *SI*. Thirty-eight pancreatic adenocarcinomas were present, as well as one cystadenoma, two papillomas, and two cases of focal pancreatitis. *SI* measurements revealed significant increases in CIs for the lesion compared with the parenchyma in T1w TSE (69.7 vs 152.7; P = 0. 0003) and T1w TFE (107.8 vs 194.2; P = 0.0002). These series also revealed significant increases in CNRs (for T1w TSE: 9.7 vs 13.0; P = 0.0407 and for T1w TFE: 14.5 vs 26.1; P = 0.0001). In the other series, there was no significant increase. CT detected 38 lesions, MRI without mangafodipir trisodium detected 39 lesions, and MRI with mangafodipir trisodium detected 40 lesions, giving detection accuracy rates of 88%, 91%, and 93%, respectively. Staging accuracy rates for vascular ingrowth were 81%, 75%, and 81%, respectively. Overall staging accuracy rates were 57%, 54%, and 54%, respectively, mostly due to undetected small metastases in the peritoneum, omentum, or liver (< 1 cm). This study indicates that a) MRI after mangafodipir trisodium gives a better delineation of the tumor in T1w series, but b) does not significantly improve the detection rate and staging accuracy of focal pancreatic lesions over MRI without this contrast medium.

4/3,AB/22
DIALOG(R)File 155:MEDLINE(R)

09016024 20309303 PMID: 10852463
Reduced *pancreatic* B cell compensation to the insulin resistance of aging: impact on proinsulin and insulin levels.
Roder M E; Schwartz R S; Prigeon R L; Kahn S E
Department of Medicine, Veterans Affairs Puget Sound Health Care System, Harborview Medical Center, University of Washington, Seattle 98108, USA. mir@dadlnet.dk
Journal of clinical endocrinology and metabolism (UNITED STATES) Jun 2000, 85 (6) p2275-80, ISSN 0021-972X Journal Code: 0375362
Contract/Grant No.: DK-02654; DK; NIDDK; DK-12829; DK; NIDDK; DK-17047; DK; NIDDK; +
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Type 2 diabetes mellitus is associated with insulin resistance, reduced B cell function, and an increase in the proinsulin (PI) to immunoreactive insulin (IRI) ratio (PI/IRI); the latter is thought to be an indication of B cell dysfunction. Normal aging is associated with insulin resistance and reduced B cell function, but it is not known whether changes in PI and the PI/IRI ratio are also a feature of the aging-associated B cell dysfunction. Therefore, we tested whether the aging-associated changes in insulin sensitivity and B cell function result in changes in PI and IRI levels that are proportionate or whether they are disproportionate as in type 2 diabetes. Twenty-six healthy older (mean +/- SEM age, 67 +/- 1 yr) and 22 younger (28 +/- 1 yr) subjects with similar body mass indexes (27.9 +/- 0.6 vs. 26.3 +/- 1.0 kg/m2) were studied. PI was measured by a RIA recognizing both intact PI and its conversion intermediates. The insulin sensitivity index (*SI*) was quantified using the minimal model, and B cell function was measured as fasting insulin levels, the acute insulin response to glucose (AIRglucose), and as the acute insulin response to arginine at maximal glycemic potentiation (AIRmax). B cell function was also adjusted for *SI* based on the known hyperbolic relationship between these two variables. Older and younger subjects had similar fasting glucose (5.3 +/- 0.1 vs. 5.2 +/- 0.1 mmol/L), IRI (83 +/- 8 vs. 76 +/- 9 pmol/L), PI (8.9 +/- 0.8 vs. 10.6 +/- 2.0 pmol/L), and PI/IRI ratio (12.3 +/- 1.3% vs. 13.9 +/- 1.6%; all P = NS) despite a 50% reduction of insulin sensitivity (*SI* , 1.94 +/- 0.21 vs. 3.88 +/- 0.38 x 10(-5) min(-1)/pmol x L; P < 0.001) and in B cell function [*SI* x fasting IRI, 139 +/- 18 vs. 244 +/- 24 x 10(-5)(P < 0.001); *SI* x AIRglucose, 0.75 +/- 0.13 vs. 1.70 +/- 0.15 x 10(-2) min(-1) (P < 0.001); *SI* x AIRmax, 3.63 +/- 0.53 vs. 6.81 +/- 0.70 x 10(-2) min(-1) (P < 0.001)] in the older subjects. These findings suggest that the B cell dysfunction in older subjects is not associated with disproportionate proinsulinemia. However, in older subjects the B cell response to the insulin

resistance of aging is reduced whether measured as fasting levels of PI or IRI or as the acute response to secretagogues. Thus, when examined in terms of the degree of insulin sensitivity, the lower fasting IRI levels in older subjects suggest that the utility of fasting insulin levels as a surrogate measure of insulin resistance in older individuals may be limited.

4/3,AB/23
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08877532 20163434 PMID: 10701499
Lessons from in vitro perifusion of *pancreatic* islets isolated from 80 human pancreases.
Bertuzzi F; Garancini P; Socci T C; Nano R; Taglietti M V; Santopinto M; Di Carlo V; Davalli A M
Istituto Scientifico San Raffaele, Department of Surgery, University of Milan, Italy. bertuzzi.federico@hsr.it
Cell transplantation (UNITED STATES) Nov-Dec 1999, 8 (6) p709-12, ISSN 0963-6897 Journal Code: 9208854
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
We report the average insulin response to acute glucose measured by in vitro perifusion of pancreatic islets isolated from 80 consecutive human organs. Different perifusion parameters were considered [basal release, stimulation index (*SI*), time to peak, incremental area under the curve delta-AUC alpha)], and the correlation among them was determined. *SI* positively correlated with delta-AUC alpha ($p < 0.001$, $r = 0.80$) while negatively with time to peak ($p < 0.05$, $r = -0.23$). We also evaluated several variables of the isolation procedure that might affect responsiveness to glucose by human islets. Sex and age of pancreas donors, cold ischemia time, duration of the digestion, collagenase concentration, and lot characteristics (collagenase, trypsin, clostripain, and proteases activity), and final islet yield were considered. Multivariate regression analysis showed only an independent association between *SI* and the concentration of collagenase ($p = 0.01$).

4/3,AB/24
DIALOG(R)File 155:MEDLINE(R)
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08682046 95370651 PMID: 7642970
Cerulein-induced acute pancreatitis diminished vitamin E concentration in plasma and increased in the *pancreas*.
Antosiewicz J; Popinigis J; Ishiguro H; Hayakawa T; Wakabayashi T Department of Bioenergetics, Academy of Physical Education, Gdansk, Poland.
International journal of pancreatology - official journal of the International Association of Pancreatology (UNITED STATES) Jun 1995, 17 (3) p231-6, ISSN 0169-4197 Journal Code: 8703511
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Redistribution of vitamin E in the rat body was studied during acute pancreatitis induced by two intraperitoneal doses of cerulein 40 micrograms/kg of body weight at 1-hr intervals. Hyperamylasemia (2064 +/- 521 vs 6419 +/- 129 U/dL) and pancreatic edema (pancreatic water content, 71 +/- 1.2% vs 78 +/- 2%) were observed. In this model the increased level of lipid soluble fluorophore was also observed (274 +/- 18 vs 120 +/- 9.0 relative fluorescence per g dry wt). Parallel with these changes was a decrease in the level of vitamin E in the serum and an increase in the pancreas. The concentration of vitamin E in the pancreas after 6 h was 162 +/- 8.5 ng/mg dry mass vs 128.1 +/- 6.1 ng/mg dry mass in control animals. The effect of heparin on vitamin E redistribution induced by acute pancreatitis was also investigated. It was found that heparin at a dose of 100 U/kg body mass prevents the drop of the vitamin E level in the serum as well as the increases in the concentration in the pancreas tissue. It was concluded that acute pancreatitis induced redistribution of vitamin E in the rat body. Moreover, we studied the effects of heparin treatment on oxidative stress in the pancreas tissue. Acute pancreatitis caused an increase in lipofuscin accumulation, and a decrease in protein sulfhydryl groups in citrate synthetase (CS) and in malate dehydrogenase (MDH) activity. Heparin treatment that protected vitamin E accumulation in the pancreas tissue did not influence the changes in the level of lipofuscin and proteins sulfhydryl.(ABSTRACT TRUNCATED AT 250 WORDS)

4/3,AB/25
DIALOG(R)File 155:MEDLINE(R)
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08680718 95369323 PMID: 7641765
Reduced *pancreatic* insulin release and reduced peripheral insulin sensitivity contribute to hyperglycaemia in cystic fibrosis. Holl R W; Heinze E; Wolf A; Rank M; Teller W M
Department of Paediatrics I, University of Ulm, Germany. European journal of pediatrics (GERMANY) May 1995, 154 (5) p356-61, ISSN 0340-6199 Journal Code: 7603873
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Traditional opinion holds that patients with cystic fibrosis (CF) develop impaired glucose tolerance or diabetes due to insulinopenia caused by fibrosis of the pancreas. However, studies on the dynamics of insulin secretion and peripheral insulin action have yielded conflicting results. We studied 18 patients with CF (9 male, 9 female, age 15-29 years) and 17 healthy control subjects (8 male, 9 female, 20-32 years). Oral glucose tolerance tests and combined i.v.-glucose-tolbutamide-tests were performed on separate days in fasting subjects. Bergman's "Minimal Model" was used to quantitate both peripheral insulin sensitivity (*SI*) and insulin-independent glucose disposal (glucose effectiveness; SG). Based on National Diabetes Data Group criteria, 4 patients were classified as diabetic (22%; CF-DM), 3 patients (17%) had impaired glucose tolerance (CF-IGT) while glucose metabolism was normal in 11 patients (61%; CF-NGT). Irrespective of the degree of glucose tolerance, the insulin response to oral glucose was not reduced but delayed, up to 60 min in the CF-IGT/DM group. First-phase insulin release (0-10 min) after i.v.-glucose was significantly lower in CF patients (29% of healthy controls; P < 0.0001), with no difference between the CF-NGT and CF-IGT/DM groups. Insulin release following tolbutamide injection was only marginally reduced in CF patients (64% of controls). In contrast, *SI* was significantly reduced in the subgroup of CF patients with abnormal glucose metabolism (CF-IGT/DM: 0.97 +/- 0.16 x 10(-4) l/min/pmol; control group: 1.95 +/- 0.25; P < 0.05).(ABSTRACT TRUNCATED AT 250 WORDS)

4/3,AB/26
DIALOG(R)File 155:MEDLINE(R)
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08671041 95359639 PMID: 7633102
Pancreatic signal intensity on T1-weighted fat saturation MR images: clinical correlation.
Winston C B; Mitchell D G; Outwater E K; Ehrlich S M
Department of Radiology, Thomas Jefferson University Hospital, Philadelphia, PA, USA.
Journal of magnetic resonance imaging - JMRI (UNITED STATES) May-Jun 1995, 5 (3) p267-71, ISSN 1053-1807 Journal Code: 9105850 Document type: Clinical Trial; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To determine whether signal intensity (*SI*) of the pancreas that was less than that of liver on T1-weighted fat-suppressed (T1FS) magnetic resonance (MR) images could be used to help predict the presence of pancreatic disease, three blinded independent observers graded pancreatic *SI* relative to liver and/or renal cortex in 89 patients on T1FS images. Results were correlated with patient age and diagnosis. Among the 47 patients with a clinically normal pancreas, pancreatic *SI* was higher than that of liver in 42 and equal to that of liver in the rest, none of whom had evidence of fatty pancreas. These five patients had a mean age of 71 years, compared with 55 years for patients whose pancreas was more intense than liver (P = .02). Of the 42 patients with a clinically abnormal pancreas, only eight had pancreatic *SI* higher than that of liver. The positive predictive value for normal pancreas of an *SI* higher than that of liver was 84% and the positive predictive value for abnormal pancreas of an *SI* less than or equal to that of liver was 88%, with an overall accuracy of 86%. If normal pancreatic *SI* is defined as higher than that of liver for patients younger than 60 years and as equal to or higher than that of liver for patients older than 60 years, the positive predictive value of normal *SI* becomes 76%, the positive predictive value of decreased *SI* becomes 100%, and the overall accuracy becomes 83%.(ABSTRACT TRUNCATED AT 250 WORDS)

4/3,AB/27
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08453999 95142189 PMID: 7840206
Do *pancreatic* proteases play a role in processing prolactase and/or in the postweaning decline of lactase?
Keller P; Poiree J C; Giudicelli J; Semenza G
Department of Biochemistry, Swiss Federal Institute of Technology, Zurich.
American journal of physiology (UNITED STATES) Jan 1995, 268 (1 Pt 1) pG41-6, ISSN 0002-9513 Journal Code: 0370511
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To assess the role of pancreatic proteases in the proteolytic processing and in the postweaning decline of lactase-phlorizin hydrolase (LPH), we have determined lactase activity and the different LPH forms in postweaned rats in which a jejunal loop was excluded from contact with pancreatic secretions by a jejunal bypass procedure. As a control for the absence of pancreatic proteases, pro-sucrase-isomaltase (proSI), which is known to be split by pancreatic proteases into heterodimeric *SI*, was used. Nearly all proLPH was processed to mature LPH, indistinguishable from LPH isolated from control animals. *SI* was found only in the unsplit pro form, whereas it was normally processed to the heterodimeric *SI* in the control tissues. There were no significant differences in lactase and sucrase activities in operated and in sham-operated control animals. We conclude that pancreatic secretions are not essential for the processing

of proLPH to LPH or in the postweaning decline of LPH.

4/3,AB/28
DIALOG(R)File 155:MEDLINE(R)
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08393281 95081260 PMID: 7989456
Insulin secretion, insulin action and non-insulin-dependent glucose uptake in *pancreas* transplant recipients.
Christiansen E; Tibell A; Volund A; Rasmussen K; Tyden G; Pedersen O; Christensen N J; Madsbad S
Danish-Swedish Study Group of Metabolic Effect of Pancreas Transplantation, Steno Diabetes Center, Gentofte.
Journal of clinical endocrinology and metabolism (UNITED STATES) Dec 1994, 79 (6) p1561-9, ISSN 0021-972X Journal Code: 0375362 Document type: Clinical Trial; Controlled Clinical Trial; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To assess individual factors responsible of overall glucose tolerance after successful pancreas transplantation, an i.v. glucose tolerance test, with frequent blood sampling and tolbutamide administration to elicit a second insulin response was used to estimate insulin sensitivity (*SI*) and glucose effectiveness (SG) with Bergman's minimal model. Insulin secretion was calculated from the combined insulin-C-peptide kinetics method. These parameters were quantified in identically immunosupressed transplants: ISPx, four segmental pancreas recipients with impaired glucose tolerance; TSPx, five segmental pancrease recipients with normal glucose tolerance; WPx, five whole pancreas recipients with normal glucose tolerance; and in two controls groups, Kx, eight nondiabetic kidney recipients, and Ns, eight normal subjects. All participants had normal fasting plasma glucose and normal glycosylated hemoglobin A1C levels. The glucose tolerance KG value was significantly reduced only in ISPx compared with Ns ($P < 0.05$). *SI* was reduced by 60% in ISPx, WPx, and Kx compared with normal subjects ($P < 0.05$), whereas *SI* was reduced by 30% in TSPx compared with normal controls (P = NS). The reduction in SG was the same in all pancreas transplanted groups, as compared to Kx and Ns (by 33% and 40%, respectively, $P < 0.05$). The first-phase insulin secretion (0-5 min) was markedly reduced in ISPx and TSPx compared with Ns (by 76% and 50%), to Kx (by 84% and 66%) and to WPx (by 73% and 45%), respectively ($P < 0.05$), but similar to Ns in WPx. The overall incremental insulin secretion was reduced in ISPx compared with Ns, WPx, and Kx (by 38%, 62%, and 73%, respectively, $P < 0.05$) and reduced in TSPx compared to WPx and Kx (by 47% and 67%, respectively, $P < 0.05$) Ns secreted 43% of the total amount of insulin during the first phase the corresponding value was only 13% in ISPx vs. 24% in TSPx, 24% in Kx, and 25% in WPx, respectively ($P < 0.05$). In conclusion, after pancreas transplantation, the overall glucose tolerance is determined by the net effect of reductions in insulin sensitivity and glucose effectiveness and in the adaptability of the beta-cells to ensure sufficient insulin secretion. beta-cell function was impaired in both the whole pancreas and segmental transplant recipients, and the failure to increase insulin secretion sufficiently leads to glucose intolerance.

4/3,AB/29
DIALOG(R)File 155:MEDLINE(R)
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08392516 95080495 PMID: 7988784
Pancreatic beta-cell secretory defect associated with mitochondrial point mutation of the tRNA(LEU(UUR)) gene: a study in seven families with mitochondrial encephalomyopathy, lactic acidosis and stroke-like episodes (MELAS).
Suzuki S; Hinokio Y; Hirai S; Onoda M; Matsumoto M; Ohtomo M; Kawasaki H; Satoh Y; Akai H; Abe K; et al
Third Department of Internal Medicine, Tohoku University School of Medicine, Sendai, Japan.
Diabetologia (GERMANY) Aug 1994, 37 (8) p818-25, ISSN 0012-186X Journal Code: 0006777
Document type: Clinical Trial; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Recent evidence suggests possible linkage between diabetes mellitus and mitochondrial gene mutation. We surveyed mitochondrial tRNA(LEU(UUR)) (3243) mutation in 7 mitochondrial encephalomyopathy, lactic acidosis and stroke-like episode (MELAS) families and identified 24 mutated subjects (7 MELAS probands and 17 non-MELAS relatives) as well as 11 non-mutant family members. An OGTT in the 24 mutant relatives revealed 14 diabetic subjects, 3 with impaired glucose tolerance and 7 with normal glucose tolerance and all non-mutant family members as having normal glucose tolerance. Insulinogenic index was significantly reduced in the mutant diabetic subjects and those with impaired and normal glucose tolerance in comparison with the normal control subjects and the non-mutant members. Urinary 24-h C-peptide immunoreactivity excretion was markedly reduced in the mutant diabetic subjects and those with normal and impaired glucose tolerance, compared with the control subjects and the non-mutant family members. Plasma C-peptide immunoreactivity 6 min after glucagon injection was markedly reduced in the mutant diabetic subjects and those with normal and impaired glucose tolerance compared with the control subjects and the non-mutant family members. *Si*, an index of insulin sensitivity of the four mutant subjects was within normal range. Islet

cell antibodies were negative in sera of eight mutated diabetic subjects, 2 and 6 with impaired and normal glucose tolerance, respectively. Diabetic retinopathy and nephropathy were demonstrated in 7 (50%) and 12 (85.7%) of 14 mutant diabetic subjects, respectively.(ABSTRACT TRUNCATED AT 250 WORDS)

4/3,AB/30
DIALOG(R)File 155:MEDLINE(R)

07924321 93385153 PMID: 7690595
Differential in vitro translation of the precursors of bovine *pancreatic* trypsin inhibitor and its isoinhibitor II is controlled by the 5'-end region of their mRNAs.
Gambacurta A; Piro M C; Ascoli F
Department of Experimental Medicine and Biochemical Sciences, University of Rome Tor Vergata, Italy.
Biochimica et biophysica acta (NETHERLANDS) Sep 23 1993, 1174 (3) p267-73, ISSN 0006-3002 Journal Code: 0217513
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Bovine spleen inhibitor (*SI* II), a 58-amino-acid protein present in several bovine tissues, is an isoinhibitor of bovine pancreatic trypsin inhibitor (BPTI or aprotinin). These two proteins, which differ in seven amino-acidic residues, have very similar inhibitory activity against serine proteinases and are biosynthesized as two separate precursors of 100 residues. Higher levels of BPTI, compared to *SI* II, are found in bovine lung, as well as in other bovine tissues, in contrast to the level in vivo of the corresponding mRNAs. *SI* mRNA possesses a 90-nt 5'-end region, absent in BPTI mRNA, with an additional 5' AUG in a different open reading frame (ORF). We have used an in vitro transcription/translation system to determine the effect of this upstream region on the efficiency of *SI* precursor translation. Full-length *SI* mRNA is translated in vitro 6-fold less efficiently than BPTI mRNA. However, when *SI* mRNA lacks the 5' non-coding region, the translational efficiency of the 'truncated' transcript is significantly increased, reaching the same level as that of BPTI mRNA. In all cases the 10,500 Da precursor is the product of the in vitro translation. Our results indicate that the dramatic differences in translational efficiency of the mRNAs encoding BPTI and *SI* II in vitro parallel the different levels of the two proteins in vivo, and could be attributed to the features of the 5' non-coding region of *SI* mRNA.

4/3,AB/31
DIALOG(R)File 155:MEDLINE(R)

07549034 93003955 PMID: 1382633
Exocrine *pancreas* involvement in chronic enteropathies in infants and children]
Suferinta pancreasului exocrin in enteropatiile cronice ale sugarului *si* copilului.
Miu N; Lakatos S
Catedra Pediatrie II, I.M.F. Cluj, Napoca.
Pediatrie (Bucharest, Romania) (ROMANIA) Jul-Sep 1992, 41 (3) p66-9, Journal Code: 9109803
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
On a number of 135 cases of chronic enteropathies in patients aged 6 months--15 years, the trypsin, amilasis and lipasis levels in duodenal aspirate were investigated. In a high number, the decrease of pancreatic enzymes activity was noted and the majority of cases were accompanied by a marked dystrophy (grades II or III). Thus, it was not possible to indicate whether the low levels were primary or secondary determined.

4/3,AB/32
DIALOG(R)File 155:MEDLINE(R)

07079007 91319970 PMID: 2151637
The need for and efficacy of biliary diversions in icterogenic cancers of the *pancreatic* head]
Necesitatea *si* eficacitatea derivatiilor biliare in cancerele icterigene ale capului pancreasului.
Angelescu N; Jitea N; Constantinescu N; Burcos T; Barbulescu M Clinica de chirurgie, Spitalul Clinic Coltea, Bucuresti. Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Mar-Apr 1990, 39 (2) p111-6, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
The authors present the experience of the clinic on a group of 26 patients admitted and operated in the Clinic of Surgery, the Coltea Hospital, during 1984-1987. The paper reports, in general, on the indications for biliary derivations and then specifies the morphopathological situations met intrasurgically. Their correlation with the indices of postsurgical morbidity (12.5%), postsurgical mortality (0.8%) and length of postsurgical survival (8.2 months) shows their efficiency.

4/3,AB/33
DIALOG(R)File 155:MEDLINE(R)

[redacted]

06886160 91126274 PMID: 2149191
5-fluorouracil treatment of acute pancreatitis and of *pancreatic* and duodenal fistulae]
Tratamentul cu 5-fluorouracil al pancreatitelor acute *si* al fistulelor pancreatice *si* duodenale.
Georgescu T; Naftali Z; Varga A; Simon G; Pana C; Craciun C; Nistor V; Ilniczky P; Botianu A; Kovacs M; et al
Clinica de Chirurgie II, I.M.F. Tirgu-Mures.
Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Jan-Feb 1990, 39 (1) p45-50, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
In acute pancreatitis the mechanism involved in the auto-amplification of morbid phenomena can be suppressed in most of the cases by inhibiting the pancreatic secretion. This can also enhance the repair of pancreatic, duodenal and jejunal fistulae. On the basis of experimental studies carried out by Johnson, and on the clinical studies of Guttmann, as well as on original studies done by the authors, Ftorafur was included in the complex therapy of acute pancreatitis, and of pancreatic and duodenal fistulae. A group of 14 cases of acute pancreatitis, were treated. These included 5 necrotic-haemorrhagic pancreatitis, and 9 oedematous pancreatitis. The drug was given by continuous intravenous perfusion in doses of 1,200-1,600 mg per day, for a period of 6-12 days. In all the cases the clinical improvement of the patients as well as recovery of normal values of blood amylase were spectacular, and full recovery was achieved in all the cases. Ftorafur was also used in 3 cases of pancreatic fistulae, and in 2 cases of duodenal fistulae, and recovery was also achieved in a very short time. On the basis of this experience, although small, the authors recommend the introduction of Ftorafur in the complex therapy of acute pancreatitis, as well as in that of pancreatic and duodenal fistulae. Following administration of Ftorafur no adverse effects were noted, and in the doses mentioned above this drug did not delay the repair of surgical wounds.

4/3,AB/34
DIALOG(R)File 155:MEDLINE(R)

06845263 91085313 PMID: 1985004
Effect of synthetic prostaglandin E1 analog (ornoprostil) on gastric emptying and *pancreatic* polypeptide release after solid-meal ingestion in man.
Okano H; Saeki S; Inui A; Kawai Y; Morimoto S; Ohmoto A; Nakashima T; Miyamoto M; Oh T; Takata A; et al
Second Department of Internal Medicine, Kobe University School of Medicine, Japan.
Digestive diseases and sciences (UNITED STATES) Jan 1991, 36 (1) p47-51, ISSN 0163-2116 Journal Code: 7902782
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The effect of orally administered ornoprostil, 17S,20-dimethyl-6-oxoprost aglandin E1 methyl ester, on gastric emptying and on pancreatic polypeptide (PP) release after solid meal ingestion, was investigated in man. A radionuclide technique was used to measure gastric emptying of eight healthy volunteers. In addition, four parameters [*SI* (starting index): the lag time in the start of emptying; K value: the emptying rate; T1/2: the half emptying time; 120 min RR: the percent retention at 120 min] were determined for evaluation. Also, the PP response was analyzed according to two parameters: IPPRSI the integrated PP response for periods up to *SI* , and IPPR120, the integrated PP response for 120 min. The results demonstrated that 5 micrograms of orally administered ornoprostil significantly reduced the gastric emptying rate of solid meal (T1/2 and 120 min RR, P less than 0.05). However, ornoprostil affected neither the basal PP concentrations nor the cephalic phase of PP secretion which was determined as IPPRSI. This thus suggests that ornoprostil affects the gastric motor function without interfering with the vagal-cholinergic pathway to the stomach.

4/3,AB/35
DIALOG(R)File 155:MEDLINE(R)

06768781 91008238 PMID: 2211055
Surface coil FLASH magnetic resonance imaging of the fasting and secretin-stimulated *pancreas*.
Bis K G; Jacobs I G; Zingas A P; Klein M A; Kling G A
Department of Radiology, Detroit Receiving Hospital, Wayne State University School of Medicine, Michigan 48201.
Investigative radiology (UNITED STATES) Sep 1990, 25 (9) p977-82, ISSN 0020-9996 Journal Code: 0045377
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The purpose of this study is to investigate the response of the pancreas to secretin stimulation using magnetic resonance imaging (MRI). Using the Siemens 1.0 T Magnetom and a Helmholtz surface coil, single breath FLASH-MRI of the normal fasting pancreas was performed in the prone position, both before and after a 20-minute period after intravenous (IV) bolus injection of secretin (2 cu/kg). T2*-weighted fast low-angle shot sequences (TR = 150 mseconds; TE = 30 mseconds; flip

angle = 10 degrees; matrix = 256 X 256; acquisitions = 2) demonstrated an immediate response manifested by a significant distension of the duodenum with fluid secreted by the pancreas, as well as a gradual decline of the pancreas/muscle signal intensity (*SI*) ratio over time. Twenty minutes after secretin administration, the mean percent decrease of the pancreas/muscle *SI* ratio in six volunteers was 11.6 +/- 6.4 (1-STD). This is statistically significant (P less than .003) given a mean percent increase of the pancreas/muscle *SI* ratio of 1.6 +/- 4.8 (1-STD) in five volunteers 20 minutes after bolus injection of saline (control). Although significant duodenal distension is easily demonstrated after secretin administration, the decrease of the relative pancreatic *SI* over time is visually subtle. Further work is needed to enhance imaging of the physiologic response of the pancreas using even more rapid imaging techniques.

4/3,AB/36
DIALOG(R)File 155:MEDLINE(R)

06757084 90383317 PMID: 2205630
Treatment with a somatostatin analog decreases *pancreatic* B-cell and whole body sensitivity to glucose.
Kahn S E; Klaff L J; Schwartz M W; Beard J C; Bergman R N; Taborsky G J; Porte D
Department of Medicine, University of Washington, Seattle. Journal of clinical endocrinology and metabolism (UNITED STATES) Oct 1990, 71 (4) p994-1002, ISSN 0021-972X Journal Code: 0375362
Contract/Grant No.: DK-12829; DK; NIDDK; DK-17047; DK; NIDDK; RR-37; RR; NCRR
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To determine the specific alteration in B-cell function caused by a somatostatin analog in man and to determine the effect of the induced insulin deficiency on insulin action, we administered octreotide (SMS 201-995; 50 micrograms twice daily) to nine healthy male subjects, aged 24-35 yr. B-Cell function was assessed by measuring the acute insulin response (AIR) to glucose (AIRglucose) at fasting glucose and to arginine (AIRarg) at glucose concentrations of fasting, approximately 14 and more than 28 mM after 2 (n = 7) and 8 days (n = 9) of octreotide. The AIRarg at more than 28 mM glucose (AIR500) is an estimate of B-cell secretory capacity, while the glucose level at which 50% of AIR500 occurs is termed PG50 and can provide an estimate of B-cell glucose sensitivity. Insulin sensitivity and the parameters describing glucose disposal were measured using Bergman's minimal model. Octreotide administration resulted in the development of mild fasting hyperglycemia, marked fasting hypoinsulinemia, as well as a marked reduction in AIRglucose [mean +/- SE; pretreatment, 260 +/- 48 pM; 1 day, 62 +/- 14 pM (P less than 0.005 vs. pretreatment); 8 days, 62 +/- 7 pM (P less than 0.005 vs. pretreatment)]. In addition, there was an associated marked reduction in iv glucose tolerance. While the AIRarg at fasting glucose (pretreatment, 233 +/- 27 pM; 2 days, 144 +/- 27 pM; 8 days 281 +/- 55 pM) and AIR500 (pretreatment 1000 +/- 178 pM; 2 days, 651 +/- 82 pM; 8 days, 1041 +/- 219 pM) remained unchanged, the AIRarg at 14 mM decreased significantly during octreotide [pretreatment 986 +/- 178 pM; 2 days, 363 +/- 62 pM (P less than 0.001 vs. pretreatment); 8 days, 623 +/- 130 pM (P less than 0.005 vs. pretreatment)], resulting in a rightward shift of the dose-response curve such that the estimated PG50 increased from 8.8 +/- 0.6 to 12.9 +/- 1.3 mM (P less than 0.05) after 2 days and was maintained for 8 days (11.2 +/- 0.8 mM; P less than 0.05 vs. pretreatment). Despite the development of marked insulin deficiency, the insulin sensitivity index (*SI*) did not change significantly (pretreatment, 11.34 +/- 1.59 x 10(-5); 1 day, 10.01 +/- 2.28 x 10(-5); 7 days, 9.65 +/- 1.69 x 10(-5) min-1/pM).(ABSTRACT TRUNCATED AT 400 WORDS)

4/3,AB/37
DIALOG(R)File 155:MEDLINE(R)

06723858 90349893 PMID: 2534895
An experimental study of the action of 5-fluorouracil on the function and cytomorphology of the exocrine *pancreas*]
Studiu experimental privind actiunea 5-fluorouracilului asupra functiei *si* citomorfologiei pancreasului exocrin.
Georgescu T; Naftali Z; Simu G; Barbat G; Simon G; Varga A; Pana C Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Nov-Dec 1989, 38 (6) p447-53, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
The authors have taken up previous studies by Martin (1969), and by Johnson (1973), and carried out an experimental study on white rats aimed at evaluating the morpho-functional changes of cells from the exocrine pancreas under the influence of 5-fluorouracil (Ftorafur), a cytostatic drug which is a general inhibitor of protein synthesis by cells. Ftorafur was injected in amounts of 2.3 mg/100 g of body weight, and a significant reduction was noted in the secretion of bicarbonates, amylase and lipase by the pancreas of the animals. Cytologic changes were also noted in the pancreatic tissue of these animals, indicating, on the one hand, a deficient protein and enzyme synthesis by the pancreatic cells, and a blocking of the mechanism of discharge of zymogen granules, on the other hand. The

most intensive morpho-functional changes were noted following repeated administration of Ftorafur, probably due to the cumulative effects of this substance at the level of secretory pancreatic cells. The authors consider that 5-fluorouracil inhibits to a considerable degree the synthesis of pancreatic enzymes, and as such it can be used as a therapeutic means for the reduction of the external secretion of the pancreas.

4/3,AB/38
DIALOG(R)File 155:MEDLINE(R)
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06543140 90168293 PMID: 2407424
A program to estimate insulin sensitivity and *pancreatic* responsivity from an IVGTT using the minimal modeling technique. Vega-Catalan F J
Computer Science Department, University of Ibadan, Nigeria. Computers and biomedical research, an international journal (UNITED STATES) Feb 1990, 23 (1) p1-9, ISSN 0010-4809 Journal Code: 0100331
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
A user-friendly program coded in PASCAL for the IBM PC has been developed to determine the etiology of impaired glucose tolerance using an intravenous glucose tolerance test (IVGTT). It makes use of the "minimal modeling technique," a method that has been shown to be adequate for the quantitative determination of insulin sensitivity and insulin resistance. Two models are used, the minimal model of glucose disappearance and the minimal model of insulin kinetics. The first model is described by two nonlinear ordinary differential equations (ODEs) which are solved numerically, and which yield the insulin sensitivity index *SI*. The second model is described by an ODE for which an explicit solution was obtained, and which yields the pancreatic responsivity parameters phi 1 and phi 2. The product *SI*.phi 2 can be used to segregate subjects into "good" and "low" tolerance types. The program provides best-fit plots along with numerical values of the parameters and their uncertainties, and requires little intervention from the user. The fact that it requires a noninvasive IVGTT as input and that it has been written for the ubiquitous IBM PC are added advantages.

4/3,AB/39
DIALOG(R)File 155:MEDLINE(R)
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06372064 89388528 PMID: 2476863
The value of routine *pancreatic* iso-amylase measurements in the diagnosis of pancreatitis.
Mohamed A H; Danilewitz M D; Becker P J; Jeppe C
Department of Medicine, University of the Witwatersrand, Johannesburg. South African medical journal. Suid-Afrikaanse tydskrif vir geneeskunde (SOUTH AFRICA) Sep 16 1989, 76 (6) p258-62, ISSN 0038-2469 Journal Code: 0404520
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The value of serum pancreatic iso-amylase (Pi) measurements in the clinica diagnosis of pancreatitiss was assessed using a wheat inhibitor kit (Phadebas) and cellulose acetate membrane (CAM) electrophoresis. Wheat inhibition totally suppressed Pi activity in the sera of 3 healthy subjects with substantial Pi bands on electrophoresis. Reference intervals for Pi, salivary iso-amylase (*Si*) and total alpha-amylase were established from the sera of 61 healthy subjects using CAM electrophoresis. Sera from 47 patients were assayed. Twenty-three had proven acute pancreatitis (AP) and 24 had established chronic pancreatitis (CP). All patients with AP had elevated serum Pi levels. Fifteen of these patients had a low P3 index, which ranged between 55.8% and 82.6% with a mean of 67.1%. An index of less than 100% indicates the presence of P3 isoamylase. P3 iso-amylase only occurred in patients with AP. Thirteen of these 15 patients did not have *Si* in their serum. In 20 of 24 patients with CP, serum Pi was reduced and in 4 it was at the lower limit of the reference interval. Ten of these patients had raised *Si* levels. In 13 of these patients the total amylase level was normal; in 4 it was increased and in 7 it was reduced. It is concluded that raised Pi and the P3 index are useful in the diagnosis and monitoring of AP; reduced Pi is highly suggestive of CP, and the use of total alpha-amylase levels alone can be misleading.

4/3,AB/40
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06329960 89346230 PMID: 2527379
Clinical and therapeutic aspects of some rare forms of *pancreatic* tumors]
Consideratii clinice *si* terapeutice privind unele forme rare de tumori ale pancreasului.
Chifan M; Strat V; Tircoveanu E; Niculescu D; Georgescu S; Dobrescu G; Florea N; Stanciu C
Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Jan-Feb 1989, 38 (1) p19-26, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
A total of 198 tumours of the pancreas have been

hospitalized between 1972 and 1987 in the 1st Surgical Clinic from Jassy. Only 10 of these tumours were benign, and these included: 2 gastrinomas, 2 insulinomas, 2 cystadenomas, one fibrolipoma, 1 lymphangioma, one hydatic cyst and a Wermer's syndrome. The particularities are analysed, of these 10 cases of benign tumours of the pancreas, and it is stressed that most of the clinical and therapeutic problems are determined by tumours of the endocrine pancreas, and especially those which are hormonally active. Thus the symptomatology of these last tumours which is difficult to evaluate, especially at the onset of the symptoms will determine a considerable delay in the surgical diagnosis, many of the patients being hospitalized in other departments before reaching the surgeon. Present possibilities for diagnosis and treatment have kept pace with progresses achieved in the field of investigations, which provide useful data from the morphological and functional viewpoints. All the 10 cases mentioned above have benefited from the surgical treatment, that was adapted according to particularities of each patient. The authors stress the importance of the extemporaneous morpho-histologic examination (with serial slides) and when the tumours are difficult to identify by direct macroscopic examination they recommend intraoperative echography and direct hormonal dosages on samples obtained from the portal circulation before and during surgery.

4/3,AB/41
DIALOG(R)File 155:MEDLINE(R)

06308984 89325166 PMID: 2666106
Differential sensitivity to beta-cell secretagogues in cultured rat *pancreatic* islets exposed to human interleukin-1 beta. Eizirik D L; Sandler S; Hallberg A; Bendtzen K; Sener A; Malaisse W J Department of Medical Cell Biology, Uppsala University, Sweden.
Endocrinology (UNITED STATES) Aug 1989, 125 (2) p752-9, ISSN 0013-7227 Journal Code: 0375040
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
The early stages of insulin-dependent diabetes mellitus are characterized by a selective inability to secrete insulin in response to glucose, coupled to a better response to nonnutrient secretagogues. The deficient glucose response may be a result of the autoimmune process directed toward the beta-cells. Interleukin-1 (IL-1) has been suggested to be one possible mediator of immunological damage of the beta-cells. In the present study we characterized the sensitivity of beta-cells to different secretagogues after human recombinant IL-1 beta (rIL-1 beta) exposure. Furthermore, experiments were performed to clarify the biochemical mechanisms behind the defective insulin response observed in these islets. Rat pancreatic islets were isolated and kept in tissue culture (medium RPMI-1640 plus 10% calf serum) for 5 days. The islets were subsequently exposed to 60 pM human recombinant IL-1 beta during 48 h in the same culture conditions as above and examined immediately after IL-1 exposure. The rIL-1 beta-treated islets showed a marked reduction of glucose-stimulated insulin release. Stimulation with arginine plus different glucose concentrations, and leucine plus glutamine partially counteracted the rIL-1 beta-induced reduction of insulin release. The activities of the glycolytic enzymes hexokinase, glucokinase, and glyceraldehyde 3-phosphate dehydrogenase, were similar in control and IL-1-exposed islets. Treatment with IL-1 also did not impair the activities of NADH+- and NADPH+-dependent glutamate dehydrogenase, glutamate-aspartate transaminase, glutamate-alanine transaminase, citrate synthase, and NAD+-linked isocitrate dehydrogenase. The oxidation of D-[6-14C]glucose and L-[U-14C]leucine were decreased by 50% in IL-1-treated islets. Furthermore, there was a significant decrease in the ratios of [2-14C]pyruvate oxidation/[1-14C]pyruvate decarboxylation and L-[U-14C]leucine oxidation/L-[1-14C]leucine decarboxylation, indicating that IL-1 decreases the proportion of generated acetyl-coenzyme-A residues undergoing oxidation. However, in the presence of IL-1 there was a significant increase in L-[U-14C]glutamate oxidation. These combined observations suggest that exposure to IL-1 induces a preferential decrease in glucose-mediated insulin release and mitochondrial glucose metabolism. This mitochondrial dysfunction seems to reflect an impairment in proximal steps of the Krebs cycle. It is conceivable that the IL-1-induced suppression and shift in islet metabolism can be an explanation for the beta-cell insensitivity to glucose observed in the early phases of human and experimental insulin-dependent diabetes mellitus.

4/3,AB/42
DIALOG(R)File 155:MEDLINE(R)

06250395 89266233 PMID: 2471240
Current diagnostic and treatment possibilities in *pancreatic* tumors]
Posibilitati actuale de diagnostic *si* tratament in tumorile pancreasului.
Lazar C; Dolinescu C
Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi (ROMANIA) Jul-Sep 1988, 92 (3) p497-506, ISSN 0300-8738 Journal Code: 0413735
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/43
DIALOG(R)File 155:MEDLINE(R)
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05374335 87052671 PMID: 3640682
MINMOD: a computer program to calculate insulin sensitivity and *pancreatic* responsivity from the frequently sampled intravenous glucose tolerance test.
Pacini G; Bergman R N
Computer methods and programs in biomedicine (NETHERLANDS) Oct 1986, 23 (2) p113-22, ISSN 0169-2607 Journal Code: 8506513
Contract/Grant No.: AM-27619; AM; NIADDK; AM-29867; AM; NIADDK Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Insulin sensitivity and pancreatic responsivity are the two main factors controlling glucose tolerance. We have proposed a method for measuring these two factors, using computer analysis of a frequently-sampled intravenous glucose tolerance test (FSIGT). This 'minimal modelling approach' fits two mathematical models with FSIGT glucose and insulin data: one of glucose disappearance and one of insulin kinetics. MINMOD is the computer program which identifies the model parameters for each individual. A nonlinear least squares estimation technique is used, employing a gradient-type of estimation algorithm, and the first derivatives (not known analytically) are computed according to the 'sensitivity approach'. The program yields the parameter estimates and the precision of their estimation. From the model parameters, it is possible to extract four indices: SG, the ability of glucose per se to enhance its own disappearance at basal insulin, *SI*, the tissue insulin sensitivity index, phi 1, first phase pancreatic responsivity, and phi 2, second phase pancreatic responsivity. These four characteristic parameters have been shown to represent an integrated metabolic portrait of a single individual.

4/3,AB/44
DIALOG(R)File 155:MEDLINE(R)
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05121519 86122127 PMID: 4089326
Clinical and therapeutic considerations of *pancreatic* pseudocyst] Consideratii clinice *si* terapeutice in pseudochistul de *pancreas*.
Dolinescu C; Plesa C; Raileanu R; Stoian M; Diaconu C; Burcoveanu C; Baltag D
Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi (ROMANIA) Apr-Jun 1985, 89 (2) p241-4, ISSN 0300-8738 Journal Code: 0413735
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/45
DIALOG(R)File 155:MEDLINE(R)
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04885146 85191706 PMID: 3158037
Clinical and therapeutic aspects of *pancreatic* pseudocyst] Consideratii clinice *si* terapeutice privind chistul fals de *pancreas*.
Oancea T; Horvat T; Cojocea V; Tranca D; Cordos I; Eliad A Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Jan-Feb 1985, 34 (1) p7-12, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/46
DIALOG(R)File 155:MEDLINE(R)
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04733544 85039478 PMID: 6238353
Pseudocysts of the *pancreas* ; details of diagnosis and surgical treatment]
Pseudochisturile pancreasului; particularitati de diagnostic *si* de tratament chirurgical.
Gradinaru V; Seicaru T; Kelemen V
Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) May-Jun 1984, 33 (3) p177-87, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/47
DIALOG(R)File 155:MEDLINE(R)
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04380052 84021762 PMID: 6353996
Purification of mitochondria and secretory granules isolated from *pancreatic* beta cells using Percoll and Sephacryl S-1000 superfine. Andersson T; Abrahamsson H
Analytical biochemistry (UNITED STATES) Jul 1 1983, 132 (1) p82-8, ISSN 0003-2697 Journal Code: 0370535
Document type: Journal Article
Languages: ENGLISH

Main Citation Owner: NLM
Record type: Completed
Mitochondria and secretory granules were isolated from beta-cell-rich pancreatic islets of ob/ob mice. Crude fractions obtained by differential centrifugation were subjected to centrifugation on isotonic Percoll. The gradient medium was removed from the resulting fractions by gel filtration on Sephacryl S-1000 Superfine. When compared to the crude fractions, the purified mitochondrial fraction exhibited a 4.5-fold increase in citrate synthase activity, a 70% reduction of lysosomal arylsulfatase, and a 40% decrease of contamination with granular insulin. In the purified secretory granule fraction, the insulin content was as high as 60% of the total protein (albumin standard) with arylsulfatase unchanged and no detectable citrate synthase activity.

4/3,AB/48
DIALOG(R)File 155:MEDLINE(R)

04067298 83196549 PMID: 7170498
Giant *pancreatic* fibrolipoma. Clinical and therapeutic considerations]
Fibrolipom *pancreatic* gigant. Consideratii clinice *si* terapeutice.
Lazar C; Chifan M; Tircoveanu E; Cotea E; Florea N; Dobrescu G Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi (ROMANIA) Jul-Sep 1982, 86 (3) p480, 484, ISSN 0300-8738 Journal Code: 0413735
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/49
DIALOG(R)File 155:MEDLINE(R)

03740713 82152029 PMID: 6461031
Pancreatic pseudocysts and fistulas]
False chisturi *si* fistule pancreatice.
Bancu E V; Csizer Z; Georgescu T; Baghiu M; Gliga V
Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Sep-Oct 1981, 30 (5) p333-9, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
The authors present false pancreatic cysts and fistulae that have been encountered inthe practice of the I-st Clinic of Surgery from Tg-Mures over a period of 10 years (between 1964 ans 1979). The author's personal cases are presented and the rarity of this type of disturbances is stressed. A total of 14 cases are described, of which 8 were false pancreatic cysts and 6 were false pancreatic fistulae. The major complications that occurred in the cases with false pancreatic cysts the most severe was the intra-cyst haemorrhage, that was encountered in 2 patients (of which one developed severe shock), and peritonitis, following rupture of the cyst in the peritoneal cavity. The 6 pancreatic fistulae have developed following surgery (3 cases), trauma (one case), and acute pancreatitis (2 cases). The treatment of the false cysts consisted in the external drainage (two emergencies), and cyst-gastrectomy. Pancreatic fistulae have benefited from fistulo-gastrostomy (two cases), while the remaining 4 patients were treated conservatively. Only one death was recorded in this group of patients.

4/3,AB/50
DIALOG(R)File 155:MEDLINE(R)

03236593 80191335 PMID: 545591
Problems in the diagnosis and treatment of surgical pathology of the *pancreas*]
Probleme de diagnostic *si* tratament in patologia chirurgicala a pancreasului.
Lazar C; Dolinescu C
Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi (ROMANIA) Apr-Jun 1979, 83 (2) p185-96, ISSN 0300-8738 Journal Code: 0413735
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/51
DIALOG(R)File 155:MEDLINE(R)

03047264 79224701 PMID: 752836
Cancer of the head of the *pancreas* and common bile duct (an anatomical, cholangiographic and clinical study)]
Cancerul capului pancreasului *si* calea biliara principala (studiu anatomic, colangiografic *si* clinic).
Juvara L; Vereanu L
Revista de chirurgie, oncologie, radiologie, o.r.l., oftalmologie, stomatologie. Chirurgie (ROMANIA) Nov-Dec 1978, 27 (6) p401-7, ISSN 0377-5003 Journal Code: 7508736
Document type: Journal Article ; English Abstract
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

A study was carried out on the principal alterations of the common bile duct in pancreatic neoplasms by gross and microscopic morphological examinations and intraoperative cholangiographies. Correlation of the data furnished evidence of various coinvolvement mechanisms of the lower common bile duct by the neoplastic process, mechanisms that lead to a closer understanding of the clinical symptomatology and interpretation of intraoperative cholangiographies.

4/3,AB/52
DIALOG(R)File 155:MEDLINE(R)
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01732061 74143316 PMID: 4362666
Physiopathological and anatomoclinical bases of surgery of duodenal ulcer (cortical, diencephalic, hypophyseal, *pancreatic* , (adrenal) and vagogastric pathogenic hypothesis)]
Bazele fiziopatologice *si* anatomoclinice ale chirurgiei ulcerului duodenal (ipoteza patogenicca cortico-diencefalo-hipofizo-pancreato--(supra renalo)--vago-gastrica.
Mandache F; Prodescu V; Constantinescu S; Vasiliu M; Ghergut A Chirurgia (ROMANIA) Feb 1974, 23 (2) p97-110, ISSN 0009-4730 Journal Code: 7501738
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/53
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

01722292 74132114 PMID: 4150487
The effect of ethionine on the energy-producing metabolism in the rat *pancreas* . II. Alterations of tissue levels of adenine nucleotides, pyridine nucleotides, and glycolytic metabolites.
Goebell H
Hormone and metabolic research. Hormon- und Stoffwechselforschung. Hormones et metabolisme (GERMANY, WEST) Jan 1974, 6 (1) p44-9, ISSN 0018-5043 Journal Code: 0177722
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

4/3,AB/54
DIALOG(R)File 155:MEDLINE(R)
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01719154 74128875 PMID: 4206453
Giant duodenal diverticulum and annular *pancreas*]
Diverticul duodenal gigant *si* *pancreas* inelar.
Juvara I; Gavrilescu S
Chirurgia (ROMANIA) Nov 1972, 21 (11) p1025-31, ISSN 0009-4730 Journal Code: 7501738
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/55
DIALOG(R)File 155:MEDLINE(R)
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01682859 74089962 PMID: 4775044
Comparative study of exocrine *pancreatic* function in patients with operated and unoperated gastroduodenal ulcers]
Studiu comparativ al functiei pancreatice exocrine la blonavul cu ulcer gastroduodenal neoperat *si* operat.
Ghergut A; Toculescu E; Manescu M; Mandache F
Chirurgia (ROMANIA) Dec 1973, 22 (12) p1109-18, ISSN 0009-4730 Journal Code: 7501738
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/56
DIALOG(R)File 155:MEDLINE(R)
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01661086 74066475 PMID: 4148877
The effect of ethionine on the energy producing metabolism in the rat *pancreas* . 1. The influence on the activities of key enzymes of various metabolic pathways.
Goebell H; Schmitz-Moormann P
Hormone and metabolic research. Hormon- und Stoffwechselforschung. Hormones et metabolisme (GERMANY, WEST) Nov 1973, 5 (6) p435-9, ISSN 0018-5043 Journal Code: 0177722
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

4/3,AB/57
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

01488882 73133902 PMID: 4655571
Exocrine function of the *pancreatic* parenchyma and the duct system in post-viral active chronic hepatitis]
Functia exocrina a parenchimului *pancreatic* *si* a

sistemului ductular in hepatita cronica activa postvirusala.
Cosma V; Suciu A; Erdosy S; Bohm T; Zdrenghea L
Medicina interna (ROMANIA) Dec 1972, 24 (12) p1517-24, ISSN 0025-7869 Journal Code: 7503144
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/58
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

01392164 73004115 PMID: 4949319
Pancreatic transplantations. Review of literature and current stage of personal studies]
Transplantarile pancreatice. Trecere in revista a literaturii *si* a etapei actuale a cercetarilor personale.
Grenier J F; Gillet M; Botescu V; Jaeck D; Wong P; Thomas M; Muller G; Moody A J
Chirurgia (ROMANIA) Oct 1971, 20 (10) p865-77, ISSN 0009-4730 Journal Code: 7501738
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/59
DIALOG(R)File 155:MEDLINE(R)
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01067513 71165023 PMID: 5510657
Serum lipoprotein lipase activity in diabetes mellitus. I. Activity in primary *pancreatic* diabetes mellitus and diabetes mellitus of contra-regulation]
Activitatea lipoproteinlipazica serica in diabetul zaharat. I. activitatea in diabetul zaharat *pancreatic* primitiv *si* de contrareglare.
Gligore V; Hincu N; Ureche A
Studii si cercetari de endocrinologie (ROMANIA) 1970, 21 (6) p515-8, ISSN 0039-3924 Journal Code: 7908548
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/60
DIALOG(R)File 155:MEDLINE(R)
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01067512 71165022 PMID: 4324274
Comparison of eosinopenia caused by acupuncture of the spleen-*pancreas* meridian with tests of adrenal cortex stimulation (ACTH and insulin)]
Concordanta eozinopeniei prin acupunctura meridiantului splina-- *pancreas* cu testele de stimulare a corticosuprarenalei (ACTH *si* insulina)
Vlase L; Ionescu-Tirgoviste C; Boila I L
Studii si cercetari de endocrinologie (ROMANIA) 1970, 21 (6) p509-13 , ISSN 0039-3924 Journal Code: 7908548
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/61
DIALOG(R)File 155:MEDLINE(R)
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00998899 71075616 PMID: 5491379
On the therapeutic action of aspartate and of acetylmethionine in *pancreatic* disease caused by active chronic hepatitis] Cerecetari asupra actiunii terapeutice a aspartatului *si* acetilmetioninei in suferinta pancreatica din hepatita cronica activa. Cosma V; Szantay I; Grigoras D
Medicina interna (ROMANIA) Sep 1970, 22 (9) p1107-12, ISSN 0025-7869 Journal Code: 7503144
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/62
DIALOG(R)File 155:MEDLINE(R)
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00958993 71015612 PMID: 5474400
On the diagnosis and treatment of false cysts of the *pancreas*] Consideratii asupra diagnosticului *si* tratamentului falselor chisturi de *pancreas*.
Husanu E; Posteuca M; Andriu V; Dinu G; Ciocan G; Varzaru E Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi (ROMANIA) Jul-Sep 1970, 74 (3) p653-8, ISSN 0300-8738 Journal Code: 0413735
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/63
DIALOG(R)File 155:MEDLINE(R)
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00855358 70184328 PMID: 5444358
Some clinical and pathogenetic aspects of *pancreatic* lithiasis] Unele aspecte clinice *si* patogenetice ale

litiazei pancreatice. Florescu I; Lucaciu O; Dumitrescu I
Medicina interna (ROMANIA) Feb 1970, 22 (2) p199-205, ISSN 0025-7869 Journal Code: 7503144
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/64
DIALOG(R)File 155:MEDLINE(R)
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00515812 69032131 PMID: 5696326
Studies of the exocrine function of the *pancreas* in chronic hepatitis, using I-131 labeled triolein and scintigraphy]
Cercetarea functiei exocrine a pancreasului in hepatita cronica cu trioleina marcata cu I-131 *si* prin scintigrafie.
Cosma V; Cotul S; Szantay I; Tapalaga D; Suciu A; Ilea V
Medicina interna (ROMANIA) Jul 1968, 20 (7) p793-9, ISSN 0025-7869 Journal Code: 7503144
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/65
DIALOG(R)File 155:MEDLINE(R)
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00210591 67163858 PMID: 5965812
Research on disorders of gastric and *pancreatic* secretion in some chronic hepatic disease patients]
Cercetari privind tulburarile secretorii gastrice *si* pancreatice in unele hepatopatii cronice.
Marcus N
Studii si cercetari de medicina interna (ROMANIA) 1966, 7 (5) p493-5 , ISSN 0039-4025 Journal Code: 0417346
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/66
DIALOG(R)File 155:MEDLINE(R)
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00073795 66121698 PMID: 5879959
Relations between the exocrine *pancreas* and diabetes mellitus] Relatiile dintre pancreasul exocrin *si* diabetul zaharat. Pavel I; Bonaparte H
Studii si cercetari de medicina interna (ROMANIA) 1965, 6 (6) p563-72, ISSN 0039-4025 Journal Code: 0417346
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed

4/3,AB/67
DIALOG(R)File 155:MEDLINE(R)
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00012718 66041809 PMID: 5843760
Aprospos of coexisting *pancreatic* disease in patients with chronic hepatitis and post-hepatitis liver cirrhosis. Value of the combined pancreozymin and secretin test]
Cu privire la coafectarea pancreasului la bolnavii cu hepatite cronice *si* ciroze hepatice posthepatitice. Valoarea testului combinat cu pancreozimina *si* secretina.
Aresteanu L; Nicolau S; Rubingher L; Andreias C; Dulceanu I Medicina interna (ROMANIA) Sep 1965, 17 (9) p1111-8, ISSN 0025-7869 Journal Code: 7503144
Document type: Journal Article
Languages: ROMANIAN
Main Citation Owner: NLM
Record type: Completed
? logoff
09jun03 10:31:38 User217743 Session D607.3
$28.37 8.866 DialUnits File155
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$157.11 Estimated total session cost 9.097 DialUnits
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